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ARBORICULTURAL METHOD STATEMENT AND SCHEME OF WORKS

For Protection of Trees at Barkham Solar Farm Wokingham



April 2024

SJA ams 24126-01a

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1. Statement of purpose

1.1. The purpose of this method statement is to detail what actions need to be taken to ensure the construction of the solar farm and its associated infrastructure at Barkham Farms 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. 7 of the planning permission granted by Wokingham Borough Council, which states:

“Prior to the commencement of the development hereby permitted, an Arboricultural Method Statement and Scheme of Works shall be submitted to and approved in writing by the local planning authority. It shall provide for the retention and protection of trees, shrubs and hedges growing on or adjacent to the site in accordance with BS5837:2012 has (*sic*). No development or other operations shall take place except in complete accordance with the details as so-approved (hereinafter referred to as the Approved Scheme).

No operations shall commence on site in connection with development hereby approved (including any tree felling, tree pruning, demolition works, soil moving, temporary access construction and or widening or any other operation involving use of motorised vehicles or construction machinery) until the tree protection works required by the Approved Scheme are in place on site.

No excavations for services, storage of materials or machinery, parking of vehicles, deposit or excavation of soil or rubble, lighting of fires or disposal of liquids shall take place within an area designated as being fenced off or otherwise protected in the Approved Scheme.

The fencing or other works which are part of the Approved Scheme shall not be moved or removed, temporarily or otherwise, until all works including external works have been completed and all equipment, machinery and surplus materials removed from the site, unless the prior approval in writing of the local planning authority has first been sought and obtained”

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 24146-04) at **Appendix 2**. This plan is based on the approved site layout drawing, no. BFSF-EQNS-XX-DR-Y1-0001 Rev 3.

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**.

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.

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

2.3. Prior to the commencement of works, the project manager will send copies of any construction method statement that might have implications for 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 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 fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend. The tree felling/surgery contractor should also 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 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	Erection of tree protection fencing and site hoarding	5	Yes
3	Site clearance and removal of trees and groups listed at paragraph 3.3; grinding out of stumps	3	-
4	Pruning of trees listed at paragraph 3.4	3	
5	Placement of temporary ground protection over exposed soil adjacent to tree nos. 18, 73, 129 and 130	6	Yes
6	Installation of proposed above soil access track	8	Yes
7	Excavation for pilot holes for piles and fence posts and excavation for proposed drainage; including the phased adjustment of protective fencing adjacent to tree no. 35 and the removal of ground protection	5, 6, 9	Yes
8	Clearance of machinery/materials from site, reinstatement and landscaping	10	-
9	Removal of tree protection fencing	5	-

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. The removal of trees and vegetation behind the line of the protection fencing will be discussed at the pre-start meeting and arrangements will be made to remove small sections of the fence, under arboricultural supervision, to allow access to for the felling contractor. During felling operations, all machinery such as chippers will remain outside of the protective fencing to ensure it does not cause any soil compaction or damage to the roots of trees to be retained.

3.3. The four individual trees to be removed (nos. 23, 28, 79 and 80), the single hedgerow to be removed (H1) and the seven groups to be partially removed (G4, G21, G22, G26, G34, G37 and H2) shall be felled and disposed of.

3.4. The two groups of trees to be pruned (G33 and G35) shall be done so to the specification in the TPP.

3.5. 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.

3.6. 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. The timing of the installation of the perimeter security fencing will be confirmed at the pre-start meeting. This encompasses:

- holes for uprights 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
- if timber hoarding is used for site compounds, 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

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 the erection of the tree protection fencing (see below).

5. Protective fencing

5.1. No site clearance, ground preparation 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. The area adjacent to English oak no. 85 where the protective fencing is shown with a **dashed blue line**, indicates where fencing is to be adjusted to allow for the installation of solar panels. Protective fencing is to remain in place around the perimeter of the tree's veteran tree buffer zone (i.e. along the route of the continuous bold blue line) until immediately prior to the installation of panels in this area. At this point the fencing can be re-located to the dashed blue line. Once re-located to the position shown on the TPP, this section is to remain in place until the completion of works, in the same manner as all other protective fencing.

5.3. Once the site perimeter fencing is installed (shown as a **continuous purple line** on the TPP) sections of tree protective fencing situated between the security fence and any RPAs may be removed to allow the security fence to denote the CEZ, provided no further works are to be undertaken in these areas. If works are to take place behind the line of perimeter fencing, the tree protective fencing must remain in place. Sections of fencing where this may take place are shown by **bold cyan lines** on the TPP. Details of whether this will be acceptable in all areas shown are to be agreed with the LPA tree officer at the pre-start meeting.

5.4. 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.

5.5. 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

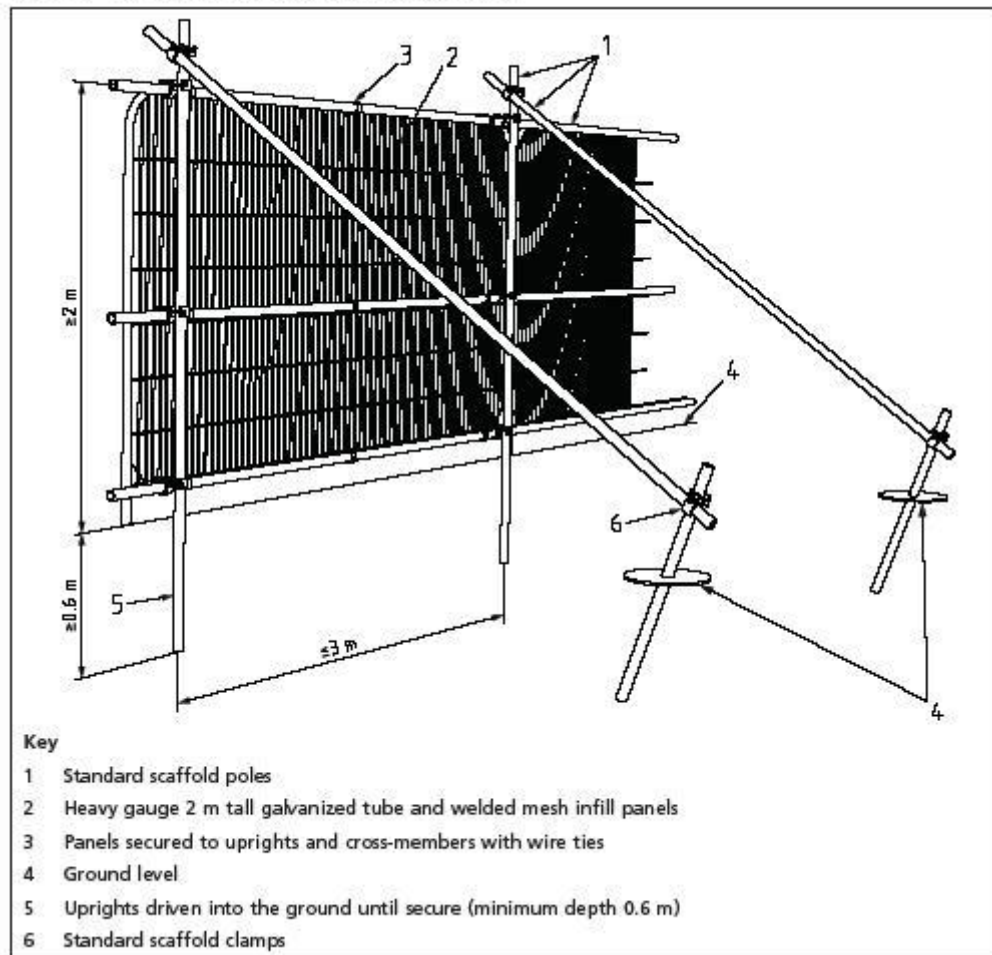


Figure 1 Protective fencing.

(Based on Figure 2, BS 5837: 2012)

5.6. 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.

5.7. 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.

5.8. 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.

5.9. 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.

5.10. 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.)

5.11. 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 or under the conditions outlined at paragraphs 5.2 and 5.11. The arboricultural consultant will be informed in advance of when it is intended to remove the fencing for any reason.

6. Ground protection

6.1. To avoid soil compaction and the resulting impairment of tree root function, the ground outside the protective fencing adjacent to the oak trees (nos. 18, 73, 129 and 130) shall be covered by appropriate ground protection, in accordance with the recommendations at Section 6.2.3 of BS 5837:2012. The place where this is to be done is **hatched pink** on the TPP.

6.2. For pedestrian-operated plant up to a gross weight of 2t, proprietary inter-linked ground protection boards (temporary aluminium roadway such as 'Trakway' or similar, or interlocking plastic tread boards such as "Ground-Guards" or similar) will be placed above a compressible material (a 150mm depth of woodchip might be appropriate), laid onto an appropriate geotextile membrane (such as 'Terram').

6.3. The ground protection will only be removed immediately prior to the installation of solar panels in the area. The arboricultural consultant will be informed in advance of when this is intended to be done and should be in attendance for the supervision of the installation of the solar panels, as detailed in **section 9**.

7. Installation of underground services

7.1. Where the new drainage route joins the existing drainage ditch within group G37, all works, including the temporary re-location of protective fencing, are to be conducted under arboricultural supervision.

7.2. The location of the new drainage route is such that no individual trees shown for retention will be impacted. However, the removal of some small shrubs within G37 may be required; any removals will be conducted at the discretion of the supervising arboricultural consultant to minimise the loss of vegetation.

7.3. The installation of the drainage route shall be in accordance with NJUG guidelines² and involves hand digging of a continuous trench to a depth of at least 750mm, under arboricultural supervision. 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.

7.4. 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 will be cut cleanly with secateurs or a sharp pruning saw.

7.5. 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.

7.6. 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

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.

salt content and may be toxic to trees). The layer of sharp sand and compost shall be 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.

7.7. 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 permeable access track located within the RPAs of tree nos. 18, 64, 129, 130 and G35 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 surface 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.

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 proposed 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 100mm. 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.

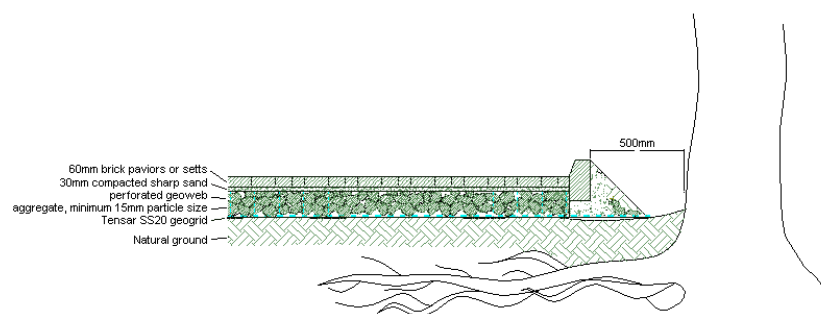


Figure 2 Illustration of a typical above-soil hard surface next to trees.

8.7. A permeable **geotextile membrane** (such as 'Treetex' or 'Terram') will be laid on top of the geoweb to prevent sand or other materials used as the base of the wearing course falling into the no-fines aggregate below.

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

8.9. 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 solar panels and fencing

9.1. Within RPAs, the installation of both the piles for the solar panels and the posts for the security fencing are to be installed following the methodology described below, under direct, on-site arboricultural supervision.

9.2. Prior to the installation of either the piles or the fence posts, pilot holes are to be dug by hand to determine the presence of any roots below. If significant roots over 25mm in diameter are encountered, the location of the pile or post will be re-located as far as practicable to avoid damaging the root. Any smaller roots encountered will be cut cleanly by the arboricultural consultant.

9.3. Any 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. If holes are to be backfilled, excavated soil or sharp sand are to be used.

9.4. The piling machine used to install the solar panels will be situated outside of RPAs wherever possible and will not be placed under any tree canopies. If being situated within an RPA is unavoidable, the area will first be covered with temporary trackway system such as 'GroundGuards' as shown in **Figure 3** below. These sections of track will then be moved to allow the machine to access the next pile location within the RPA. No machinery will enter RPAs without this protection being in place and with an arboricultural consultant in attendance.



Figure 3: Example of ground protection to be utilised in the event the piling machine must access RPAs.

9.5. If holes for either the piles or fence posts are to be filled with concrete, the holes will first be lined with heavy duty PVC to prevent the concrete from leeching into the soil.

10. Landscaping and reinstatement

10.1. Care will be taken to ensure that landscaping and reinstatement do not cause any damage to the existing trees. Any implications landscaping may have for tree to be retained will be discussed at the pre-start meeting. 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. The cut grass path to be formed following completion of construction is to be cut using a low-level machine no greater than 2t gross weight. To prevent damage to the canopies of retained trees, a tractor is not to be utilised for this purpose.

11. Supervision and monitoring

11.1. Once the protective fencing and ground boarding have been installed, 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.

11.3. 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
- construction of hard surfacing
- installation of drainage
- installation of piles and fence posts

11.4. 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.

11.5. 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.

11.6. 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

April 2024

APPENDIX 1

Tree survey schedule



ARBORICULTURAL PLANNING CONSULTANTS

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(Operations)

Preliminary Tree Survey Schedule

Barkham Solar Farm, Wokingham

April 2024

SJA tss 24126-01

Tree Survey Schedule: Explanatory Notes

Barkham Solar Farm, Wokingham

This schedule is based on a tree inspection undertaken by Edward Janes and Bryan Ng of SJATrees (the trading name of Simon Jones Associates Ltd.), between Thursday the 18th April and Friday the 19th April 2024. Weather conditions at the time ranged from clear, dry and bright to overcast with intermittent rain. Deciduous trees were in partial leaf.

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

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

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

1. Tree no.

Given in sequential order, commencing at "1".

2. Species.

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

3. Height.

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

4. Trunk diameter.

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

5. Radial crown spread.

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

6. Crown break.

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

7. Crown clearance.

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

8. Age class.

Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance.

Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height.

Mature: Apical dominance lost, tree close to ultimate height.

Over-mature: Mature, but in decline, no crown retrenchment

Veteran: Mature, with a large trunk diameter for species; but showing signs of veteranisation, irrespective of actual age, with decay or hollowing, a crown showing retrenchment and a structure characteristic of the latter stages of life.

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

9. Physiology.

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

10. Structure.

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Good: No significant morphological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired morphological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant morphological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irreparable morphological or pathological defects, such that there may be a risk of failure or collapse.

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

11. Comments.

Where appropriate comments have been made relating to:

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

12. Category.

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

Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

- (1) Trees that have a serious, irreparable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category 'U' trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning).
- (2) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
- (3) Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality.

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

- (1) Trees that are particularly good examples of their species, especially if rare or unusual.
- (2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
- (3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

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

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

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

- (1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.
- (2) Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value, and/or trees offering low or only temporary landscape benefits.
- (3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE

Barkham Solar Farm, Wokingham

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
1	Hawthorn	7m	355mm 365mm	4.9m	1.5m	0.5m	Mature	Average	Moderate	Prominent buttress roots; historically three-stemmed but W stem removed; twin stemmed from 1m with acute yet tensile union; natural brace forming at 2m; acute yet tensile unions throughout crown; evenly spread crown; crossing and rubbing branches throughout structure; minor deadwood throughout crown, consistent with age and species; minor branch failures throughout; hidden in the majority of long directed public view; of only low-level screening value; inessential feature of the landscape.	C (1)
2	English oak	18m	1410mm	N 9.5m E 10.3m S 9.1m W 11.1m	3m	2m	Mature	Average	Moderate	Prominent buttress roots; cambium death on W side of trunk leaving significant wounding up to 2.5m and 1m wide at widest point with internal heartwood exposed with no signs of internal decay and showing good signs of occlusion; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; significant tear-out wound on N lower scaffold approx. 2.5m in length and 400mm in width at widest point; dominant crown; significant tear-out wounds and pruning wounds in upper crown in excess of 150mm diameter; minor deadwood throughout crown, consistent with age and species; future potential veteran but currently lacks characteristics to be considered a veteran tree i.e. extensive hollowing, cracking, retrenchment and fungal colonisation; visible in glimpses from footpath but otherwise hidden in the majority of public view; of moderate quality and landscape value; significant feature of the landscape.	B (1)
3	English oak	16.9m	540mm	N 5.1m E 6.1m S 6.2m W 6.5m	3m	2.5m	Mature	Average	Moderate	No significant defects observed at base; trunk bifurcation at 9m showing acute yet tensile union; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; dominant crown; minor deadwood throughout crown, consistent with age and species; hidden in the majority of long directed public view; contributes to boundary screening; inessential component of the group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
4	English oak	23.3m	1435mm	N 12.8m E 10.7m S 10.2m W 14.8m	4m	1m	Mature	Average	Moderate	Prominent buttress roots, with mechanical wounding, showing good signs of occlusion; small cavity near base on N side of trunk showing signs of significant hollowing when probed; differences in tone when lower trunk tapped with acoustic hammer suggest internal defects; significant reaction wood surrounding site of cavity leading to swelling near base or 'bottle butt'; significant tear out wound on lower S scaffold approx. 2m in length and 0.5m wide at widest point with minor decay consistent with cubical brown rot; significant tear out wounds and pruning wounds in excess of 150mm diameter throughout crown showing good signs of occlusion; significant sheer crack on N co-dominant stem approx. 4m in length and 50mm wide at widest point with no evidence of internal decay; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; minor deadwood throughout crown, consistent with age and species; canopy density reduction of 10%; visible from footpath and upper crown visible in glimpses from nearby properties; contributes to boundary screening; significant feature of the landscape; significant component of group in which it stands.	B (1)
5-9	English oak	#5 17.5m #6 17.4m #7 16.9m #8 16m #9 15m	#5 995mm #6 1440mm #7 840mm #8 820mm #9 810mm	11.6m	3m	2m	Mature	Average	Moderate	Row of closely planted specimens, designed to form a hedge or screen; #9 off-site tree; prominent buttress roots; no significant defects observed at bases; #6 cavities forming near base with evidence of internal decay and hollowing when probed and with significant reactive growth around site of hollowing; #6 trunk bifurcation at 1.5m showing acute main union with external features suggesting included bark; well formed tensile main unions and tensile unions throughout rest of crowns; pruning wounds in excess of 150mm on #6, #7 and #8; sheer crack up to 2m in length and 25mm at widest point on central stem of #8; all trees showing good signs of occlusion at sites of historic wounding; minor epicormic growth throughout structures; aerodynamic group with meshing crowns providing companion shelter; minor deadwood throughout crowns, consistent with age and species; minor branch failures throughout crowns; upper crowns visible from footpath and nearby properties; contribute to boundary screening; significant feature of the landscape.	B (1)
10	English oak	16.5m	980mm	N 11.3m E 10.4m S 10m W 10m	3m	2m	Mature	Average	Moderate	Prominent buttress roots; trunk bifurcation at 3m showing well formed tensile union; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; E lower crown extents historically pruned heavily back from adjacent field leaving wounds in excess of 150mm in diameter with dense epicormic regenerative shoots emanating from sites of wounding; dominant crown; minor deadwood throughout crown, consistent with age and species; minor branch failures throughout; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; contributes to boundary screening; significant component of group in which it stands.	B (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
11	English oak	14m	1020mm	N 4.5m E 5.5m S 6.6m W 5.8m	3m	2.5m	Mature	Average	Indifferent	Lack of buttressing; significant limb failure at 2.3m W side leaving wound approx. 200mm diameter with evidence of decay; tight union at bifurcation point with established natural brace 0.5m above union; significant reactive wood around bifurcation point; tensile unions throughout rest of crown; minor epicormic growth throughout structure; historic pruning wounds in excess of 150mm with evidence of internal decay; suppressed by adjacent specimen; minor deadwood throughout crown, consistent with age and species; branch failures throughout crown; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; inessential component of the group in which it stands.	B (1)
12	English oak	17.2m	740mm	N 8.4m E 7.5m S 8.6m W 9.7m	2.3m	2m	Mature	Average	Moderate	Off-site tree; mechanical wounding at base on E side approx. 75mm in height and 100mm in width with heartwood exposed and showing good signs of occlusion; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; dominant crown; minor deadwood throughout crown, consistent with age and species; minor branch failures throughout; no significant defects observed; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; acts as part of field boundary and contributes to boundary screening; significant feature of the landscape.	B (1)
13	English oak	16m	840mm	N 7.1m E 7.5m S 8.4m W 7.9m	3m	3m	Mature	Below average	Moderate	No significant defects observed at base; well formed tensile main unions and tensile unions throughout rest of crown; much epicormic growth on major structural branches within inner canopy, suggestive of reduced physiological function; above average dead wood in crown; canopy density reduction of 15%; minor branch failures throughout; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; contributes to boundary screening; significant component of group in which it stands.	C (1)
14	English oak	18.5m	1010mm	N 6.9m E 6.5m S 7.5m W 5.4m	3m	2m	Mature	Below average	Moderate	Prominent buttress roots; established epicormic growth forms lower crown; cavities forming at sites of historic limb shedding collar; much epicormic growth on major structural branches within inner canopy, suggestive of reduced physiological function; above average dead wood in crown; canopy density reduction of 15%; minor branch failures throughout; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; contributes to boundary screening; significant component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
15-17	English oak	#15 14m #16 15m #17 16m	#15 515mm #16 435mm 505mm #17 520mm	8.9m	2m	3m	Mature	Average	Moderate	Prominent buttress roots with mechanical wounding; #16 twin stemmed from 0.5m with acute union with external features indicative of included bark; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structures; lower crowns historically pruned back from field leaving wounds approx. 50mm in diameter with good signs of occlusion; minor deadwood throughout crowns, consistent with age and species; minor branch failures throughout; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; contributes to boundary screening; significant components of the group in which they stand.	C (12)
18	English oak	24.6m	1740mm	N 11.4m E 14.9m S 14.3m W 12.2m	2m	N 2m E 2.5m S 1m W 3m	Mature	Average	Moderate	Prominent buttress roots with minor mechanical wounding; large Ganoderma sp. fungal fruiting body at base on S side with evidence of minor internal decay and hollowing; carpenter ants nest at base of tree and processions of ants up and down trunk indicative of internal decay; minor wound on SW side of trunk near base with heartwood exposed with Fomitiporia sp. bracket emanating from exposed heartwood; most established epicormic growth closer to crown break suggestive of the beginnings of the retrenchment process; no significant differences in tone were detected when tested with acoustic hammer suggesting no significant hollowing or internal decay; southern lower main scaffold showing evidence of subsidence with little reactive growth at branch collar, branch bark ridge historically split where limb partially failed but now mostly occluded with minor reactive wood and section of heartwood still exposed, tips of limb very near ground; small viewing platform made from wooden pallets installed on S lower scaffold attached with screws and nails; well formed tensile main unions and tensile unions throughout rest of crown; minor deadwood throughout crown, consistent with age and species; minor branch failures throughout; much epicormic growth on major structural branches within inner canopy; dominant spreading crown; many burrs on major structural branches; high canopy bud density; no signs of retrenchment in upper crown; sites of historic limb failures occluding well; no visible water pockets present; no evidence of cracks or significant tear-out wounds or failures throughout crown; notable tree; upper crown visible in glimpses from nearby properties and footpath but otherwise hidden in the majority of public view; future potential veteran but does not currently display the features necessary to be classified as a veteran tree; contributes to boundary screening; significant feature of the landscape; essential component of the group in which it stands.	A (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
19	English oak	19m	900mm ivy est.	N 6.1m E 8.1m S 8.4m W 7m	2m	2.5m	Mature	Below average	Indifferent	Access to tree restricted by dense vegetation, drainage ditch and boundary fence; full basal inspection prevented by dense vegetation and boundary fence; dead ivy covered; significant tear out wounds and internal decay with characteristics consistent with cubical brown rot on E lower limb; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; dominant crown; above average dead wood in crown; minor branch failures throughout; shorter than average shoot extents; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (2)
20	English oak	5m	2 stems @ 355mm ivy	4m	2m	2m	Mature	Average	Indifferent	Twin-stemmed from base; heavily ivy-covered; full inspection of main unions impeded by dense ivy cover; historically lost top leading to squat domed form; high canopy bud density; epicormic regeneration forms crown; of low quality and limited arboricultural value; readily visible from Barkham Ride; contributes to boundary screening; inessential component of the group in which it stands.	C (2)
21	English oak	13m	830mm ivy	N 7.2m E 6.9m S 7m W 6.5m	1.5m	1m	Mature	Below average	Moderate	Full basal inspection prevented by dense ivy cover and boundary fence but appears sound; heavily ivy-covered; well formed tensile main unions and tensile unions throughout rest of crown; established epicormic growth forms lower crown; much epicormic growth on major structural branches within inner canopy, suggestive of reduced physiological function; dominant crown; minor deadwood throughout crown, consistent with age and species; minor branch failures throughout; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (2)
22	English oak	6.5m	300mm ivy	4.5m	1m	2m	Semi-mature	Average	Moderate	No significant defects observed at base; partially ivy covered trunk; trunk on 10° lean to S; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; minimal deadwood; readily visible from Barkham Ride; contributes to boundary screening; of moderate quality, but currently of low value due to small size; inessential component of the group in which it stands.	C (1)
23	English oak	16.2m	1060mm ivy	N 6.8m E 5.9m S 5.7m W 8.9m	2.5m	1.5m	Over-mature	Low	Indifferent	Full basal inspection prevented by dense ivy cover; ivy covered trunk and main scaffolds; well formed tensile main unions and tensile unions throughout rest of crown; established epicormic growth forms lower crown; much epicormic growth on major structural branches within inner canopy, suggestive of reduced physiological function; above average dead wood in crown; minor dieback at branch tips; minor branch failures throughout; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
24	English oak	15.8m	740mm ivy	N 9m E 8.8m S 9.1m W 5.7m	2m	2m	Mature	Average	Moderate	No significant defects observed at base; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; part of aerodynamic pair with meshing crowns providing companion shelter; significant tear-out wound in crown on S side leaving wound approx. 150mm in diameter; above average dead wood in crown; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (12)
25	English oak	16m	530mm	N 8.5m E 3.6m S 7m W 7.8m	2m	1m	Mature	Average	Moderate	No significant defects observed at base; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; asymmetrical crown as suppressed by adjacent specimens; part of aerodynamic pair with meshing crowns providing companion shelter; minor deadwood throughout crown, consistent with age and species; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (12)
26	English oak	15m	630mm ivy	N 7m E 5.4m S 5.9m W 6m	2m	1m	Mature	Below average	Moderate	Full basal inspection prevented by dense ivy cover; dead ivy covered; well formed tensile main unions and tensile unions throughout rest of crown; minor epicormic growth throughout structure; above average dead wood in crown; canopy density reduction of 20%; minor branch failures throughout; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (2)
27	English oak	20m	1200mm	8.6m	2.5m	2.5m	Over-mature	Low	Indifferent	No significant defects observed at base; significant wound near base on N side of trunk 1.5m in height and 0.5m in width with heartwood exposed but no signs of significant decay; black exudation coming from aforementioned wound suggestive of bacterial infection; differences in tone when lower trunk tapped with acoustic hammer suggest internal defects; well formed tensile main unions and tensile unions throughout rest of crown; established epicormic growth forms lower crown; historically pruned back from field leaving wounds in excess of 150mm in diameter; 30% of crown dead; many historic branch failure points; minor epicormic growth throughout structure; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (2)
28	English oak	15.8m	700mm est.	N 4.6m E 8.4m S 7m W 5m	2.5m	2m	Mature	Low	Moderate	Access to tree restricted by dense vegetation, drainage ditch and boundary fence; full basal inspection prevented by dense vegetation and boundary fence; well formed tensile main unions and tensile unions throughout rest of crown; historically pruned back from Barkham Ride leaving wound approx. 150mm in diameter; tear cut wound 150mm diameter on E side of trunk where historically pruned back from field; minor epicormic growth throughout structure; canopy density reduction of 25% where still alive; 25% of crown dead; readily visible from Barkham Ride; contributes to boundary screening; significant component of group in which it stands.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
29	English oak	19m	690mm ivy	N 5.6m E 6m S 6.9m W 6.4m	3m	1m	Mature	Average	Moderate	Prominent buttress roots; ivy covered trunk and main scaffolds; well formed tensile main unions and tensile unions throughout rest of crown; minor deadwood throughout crown, consistent with age and species; minor epicormic growth throughout structure; minor branch failures throughout; high canopy bud density; dominant crown; visible in glimpses from nearby properties and Barkham Ride but otherwise hidden in the majority of public view; contributes to boundary screening; significant component of group in which it stands.	C (1)
30	Goat willow	10m	500mm est.	6.9m	1.8m	1m	Mature	Average	Indifferent	Access to tree restricted by dense vegetation, drainage ditch and boundary fence; no significant defects observed at base; historically failed central leader leaving significant tear out wound approx. 2m in height and 75mm in width, showing good signs of occlusion with evidence of internal decay; historically lost top leading to squat domed form; well formed tensile unions throughout crown; crossing and rubbing branches throughout structure; minor deadwood throughout crown, consistent with age and species; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; contributes to boundary screening; significant component of group in which it stands.	C (1)
31	Silver birch	13m	320mm	3.8m	3m	2.5m	Mature	Average	Moderate	Full basal inspection prevented by dense vegetation but appears sound; trunk on 30° lean to E before correcting itself at crown break; well formed tensile main unions and tensile unions throughout rest of crown; minor deadwood throughout crown, consistent with age and species; high canopy bud density; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; contributes to boundary screening; inessential component of the group in which it stands.	C (1)
32	English oak	16.8m	435mm 400mm	N 6.1m E 6.2m S 5.2m W 5.5m	3m	2m	Mature	Below average	Moderate	Twin stemmed from base showing acute union with evidence of incipient included bark; well formed tensile main unions and tensile unions throughout rest of crown; much epicormic growth on major structural branches within inner canopy, suggestive of reduced physiological function; minor deadwood throughout crown, consistent with age and species; dominant crown; visible in glimpses from nearby properties and Barkham Ride but otherwise hidden in the majority of public view; contributes to boundary screening; significant component of group in which it stands.	C (1)
50	Ash	14m	395mm	NE 3m SE 3.5m SW 4m NW 4.5m	2m	3m	Semi-mature	Average	Moderate	Part of small cluster of trees along the ditch; single trunk; twin-stemmed from 2m; one-sided crown as suppressed by adjacent specimens; visible in glimpses from the bridleway BARK14; contributes to boundary screening; of low landscape value, due to small size; inessential component of group in which it stands.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
51	English oak	13m	180mm 280mm	N 5m E 5.5m S 2.5m W 5m	0m	4m	Semi-mature	Average	Indifferent	Part of small cluster of trees along the ditch; twin stemmed from base; one-sided crown as suppressed by adjacent specimens; aerodynamic group with meshing crowns providing companion shelter; contributes to boundary screening; visible in glimpses from the bridleway BARK14; of low landscape value, due to small size.	C (1)
52	Goat willow	9m	355mm 260mm 515mm	N 6m E 7m S 6m W 7m	0m	0.5m	Semi-mature	Average	Poor	Part of small cluster of trees along the ditch; multi-stemmed from base; crossing and rubbing branches throughout structure; of poor structure condition and short-term potential; inessential component of the group in which it stands.	C (1)
53	English oak	13m	440mm	N 9m E 8.5m S 3m W 7m	1.5m	1m	Semi-mature	Average	Moderate	Part of small cluster of trees along the ditch; single trunk; twin-stemmed from 2m; one-sided crown as suppressed by adjacent specimens; part of aerodynamic group with meshing crowns providing companion shelter; visible in glimpses from the bridleway BARK14; contributes to boundary screening; of moderate quality, but currently in low landscape value due to small size; significant component of group in which it stands.	B (1)
54	English oak	13m	935mm	N 6m E 8m S 8m W 4.5m	S 2m	1.5m	Mature	Average	Indifferent	Prominent buttress roots; single trunk; water pocket at 3m above ground level; trunk bifurcation at 4.5m, showing tensile union; N stem failure at 7.5m resulting in approx. 500mm dia. tear-out wound and asymmetrical crown; canopy density reduction of 25%; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (2)
55	English oak	14m	590mm	N 4m E 6.5m S 8.75m W 7m	2.5m	1.5m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; one-sided crown as suppressed by adjacent specimens; part of aerodynamic group with meshing crowns providing companion shelter; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)
56	English oak	14m	580mm	N 8m E 6.5m S 3m W 6.5m	4m	2m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; no significant defects observed; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)
57	English oak	13m	445mm	N 4.5m E 5m S 5.75m W 5.5m	2.5m	1.5m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; tear-out wound on N stem at approx. 4m with occluding woundwood on the periphery; minimal deadwood; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
58	English oak	14m	405mm	N 4m E 6.5m S 5.5m W 6m	2m	1.5m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; no significant defects observed; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)
59	English oak	16m	530mm	N 5m E 7.5m S 4m W 7m	3.5m	1.75m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; no significant defects observed; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)
60	English oak	15m	380mm	N 3m E 4.5m S 6m W 5.75m	2.5m	2m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; no significant defects observed; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)
61	English oak	13m	365mm	N 2m E 4m S 4m W 5.75m	2.5m	2m	Semi-mature	Average	Moderate	Single trunk; narrow canopy; suppressed crown as overtopped by adjacent specimens; minimal deadwood; obscured from public views as screened by adjacent better quality trees; inessential component of group in which it stands.	C (1)
62	Ash	12m	185mm 295mm	N 3m E 8.5m S 4m W 0.5m	0m	1.5m	Semi-mature	Average	Indifferent	Twin stemmed from base; canopy entirely offset from base; suppressed crown as overtopped by adjacent specimens; obscured from public view; inessential component of the group in which it stands.	C (1)
63	English oak	16m	640mm	N 7.5m E 7.5m S 8m W 8.5m	E 1.5m	1.75m	Semi-mature	Average	Moderate	Single trunk; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)
64	Ash	17m	215mm 335mm 430mm 150mm 290mm	N 6m E 6.5m S 4m W 7.5m	0.5m	2m	Semi-mature	Below average	Indifferent	Wound with exposed heartwood on root 1m W of base; multi-stemmed from 0.5m; deadwood up to 120mm dia. in lower crown; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minor dieback at branch tips, consistent with ash-dieback disease; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; of short term potential.	C (2)
65	English oak	13.5m	445mm 485mm	N 7.5m E 7m S 5.5m W 7.25m	E 1.5m	1.75m	Semi-mature	Average	Moderate	Twin-stemmed from 1m; tensile unions throughout crown, where visible; one-sided crown as suppressed by adjacent specimens; part of aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; no significant defects observed; visible in narrow, long views from bridleway BARK14; contributes to boundary screening; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
66	Hawthorn	5m	6 stems @ 110mm	2.5m	0m	0.75m	Young	Average	Indifferent	Multi-stemmed from base; of low landscape value, due to small size; inessential feature of the landscape.	C (1)
67	Hawthorn	4m	5 stems @ 100mm	2.5m	0m	0m	Young	Average	Indifferent	Full basal inspection prevented by dense understorey cover; multi-stemmed from base; of low landscape value, due to small size; inessential feature of the landscape.	C (1)
68	English oak	19.5m	1240mm	N 7.5m NE 9.5m E 9.75m SE 10.5m S 10m SW 11.5m W 10m NW 9.5m	2.5m	N 4m E 2m S 2m W 2m	Mature	Average	Moderate	Prominent buttress roots; bark wound from ground up to 1.1m E side; internal heartwood exposed 500mm wide; fungal fruiting bodies at 0.75m E and trunk base SE; slight difference in tone when SE adaptive reaction wood tapped with acoustic hammer suggest internal decay; no significant differences in tone on the remaining circumference were detected; multi-stemmed from 2.5m; tensile unions throughout crown, where visible; notable tree; no evidence of dysfunction or extensive retrenchment observed; notable tree; visible in glimpse views from bridleway BARK14; significant feature of the landscape.	A (123)
69	English oak	18.5m	1095mm ivy	N 11.5m E 10m S 10m W 8.5m	2.5m	4m	Mature	Below average	Moderate	Off site tree; single trunk; heavily ivy-covered; multi-stemmed from 3.5m; tensile unions throughout crown, where visible; aerodynamic group with meshing crowns providing companion shelter; scattered deadwood throughout crown, consistent with ages and species; deadwood up to 150mm in diameter, est.; readily visible from Commonfield Lane; contributes to boundary screening; significant component of group in which it stands.	B (2)
70	Ash	14m	660mm ivy	N 6.5m E 5m S 5m W 5m	3m	3.5m	Semi-mature	Average	Moderate	Single trunk; ivy-covered; multi-stemmed from 3m; tensile unions throughout crown, where visible; narrow canopy; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; visible in glimpse views from Commonfield Lane; significant component of group in which it stands.	B (12)
71	English oak	14m	400mm ivy	N 3m E 4m S 5m W 5m	3m	N 6m E 4m S 2.5m W 4m	Semi-mature	Below average	Moderate	Off site tree; single trunk; ivy-covered; asymmetric crown as suppressed by adjacent specimens; part of aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; no significant defects observed; visible in glimpse views from Commonfield Lane; of low landscape value, due to small size; inessential component of the group in which it stands.	C (12)
72	English oak	16m	680mm ivy	N 7.5m E 8m S 7m W 5.5m	3m	N 2m E 2m S 2m W 4m	Semi-mature	Average	Moderate	Off site tree; single trunk; ivy-covered; multi-stemmed from 2.5m; tensile unions throughout crown, where visible; drawn-up specimen; part of aerodynamic group with meshing crowns providing companion shelter; no significant defects observed; readily visible from Commonfield Lane; contributes to boundary screening; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
73	English oak	18.5m	1510mm ivy	N 13m E 12m S 13m W 10.5m	2.5m	N 3m E 3m S 3m W 4m	Mature	Below average	Moderate	Single trunk; heavily ivy-covered; multi-stemmed from 2.5m; tensile unions throughout crown, where visible; of dominant canopy; scattered deadwoods throughout canopy; deadwood up to 250mm in diameter, est.; no evidence of dysfunction or extensive retrenchment observed; notable tree; readily visible from Commonfield Lane; contributes to boundary screening; significant component of group in which it stands.	A (23)
74	English oak	15m	805mm ivy	N 8m E 8.5m S 7m W 8.5m	2m	N 3m E 4m S 3m W 4m	Mature	Below average	Moderate	Single trunk; heavily ivy-covered; twin-stemmed from 2m; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; no significant defects observed; readily visible from Commonfield Lane; contributes to boundary screening; significant component of group in which it stands.	B (12)
75	Ash	14m	360mm 410mm 340mm all ivy	N 4m E 7m S 6m W 2m	0m	3.5m	Semi-mature	Average	Indifferent	Multi-stemmed from base; ivy-covered; asymmetric crown as suppressed by adjacent specimens; part of aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; minor dieback at branch tips; visible in glimpse views from Commonfield Lane; of low landscape value, due to small size; inessential component of group in which it stands.	C (1)
76	English oak	16m	1850mm ivy	N 8m E 9m S 8.5m W 6.5m	3m	4m	Mature	Below average	Moderate	Off site tree; single trunk; heavily ivy-covered; multi-stemmed from 3m; tensile unions throughout crown, where visible; of dominant canopy; minimal deadwood; minor diebacks at branch tips; crown shows early stage of retrenchment; notable tree; readily visible from Commonfield Lane; contributes to boundary screening; significant component of group in which it stands.	A (23)
77	English oak	13m	600mm 285mm	N 9.5m NE 9m E 9m S 9m W 7m	0.5m	1m	Semi-mature	Average	Moderate	Twin-stemmed from 0.5m; tensile unions throughout crown, where visible; of squat, domed form; no significant defects observed; obscured from public view; of moderate potential; significant feature of the landscape.	B (1)
78	English oak	13.5m	810mm est.	N 6m E 7m S 4m W 6m	2.5m	4.5m	Mature	Below average	Moderate	Full basal inspection prevented by dense understorey; single trunk; twin-stemmed from 2.5m; small cavities forming at sites of previous pruning wounds; slightly sparsely foliated; minor dieback at branch tips; crown density reduction of 20%; readily visible from Barkham Ride; significant component of group in which it stands.	B (2)
79	English oak	12m	415mm	N 5.5m E 7m S 3m W 7m	1.5m	N 2m E 1.5m S 4m W 0.5m	Semi-mature	Average	Moderate	Single trunk; multi-stemmed from 2m; tensile unions throughout crown, where visible; no significant defects observed; readily visible from Barkham Ride; of moderate quality, but currently of low value due to small size; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
80	English oak	12m	485mm	N 6m E 7.5m S 6m W 7m	4m	N 2m E 2m S 4m W 2m	Semi-mature	Average	Moderate	Single trunk; multi-stemmed from 4m; tensile unions throughout crown, where visible; no significant defects observed; readily visible from Road; of moderate quality, but currently of low value due to small size; significant component of group in which it stands.	B (12)
81	English oak	18.5m	1080mm est.	N 8.5m E 9m S 8m W 9m	1.5m	N 2m E 1.5m S 3m W 1.5m	Mature	Below average	Moderate	Full basal inspection prevented by dense understorey and boundary fencing; single trunk; multi-stemmed from 5m; wound with exposed heartwood at approx. 7m S; woundwood formed in the periphery; deadwood up to 150mm in diameter, est. at lower crown; minor dieback at branch tips; readily visible from Barkham Ride; significant component of group in which it stands.	B (2)
82	English oak	23m	1340mm	N 10m NE 11m E 11m S 12m W 10m	4m	2m	Mature	Average	Moderate	Prominent buttress roots; single trunk; twin-stemmed from 4m, showing a tensile union; scattered deadwood in lower crown; deadwood up to 120mm in diameter, est.; no evidence of dysfunction or extensive retrenchment observed; notable tree; readily visible from Barkham Ride and public bridleway BARK11; contributes to boundary screening; significant component of group in which it stands.	A (123)
83	English oak	14m	270mm 350mm all ivy est.	N 5m E 5.5m S 5m W 5m	1.5m	2.5m	Semi-mature	Average	Moderate	Off site tree; full basal inspection prevented by dense understorey and boundary fencing; situated at the edge of ditch; twin-stemmed from 1.5m; heavily ivy-covered; no significant defects observed; visible in glimpse views from bridleway BARK11; of moderate quality, but currently in low landscape value due to small size; significant component of group in which it stands.	B (12)
84	English oak	13m	480mm ivy est.	N 6.5m E 5m S 4m W 5m	1.5m	2m	Semi-mature	Average	Moderate	Off site tree; full basal inspection prevented by dense understorey and boundary fencing; situated at the edge of ditch; ivy-covered; twin-stemmed from 1.5m; W stem bifurcation at 2m; no significant defects observed; visible in glimpse views from bridleway BARK11; of moderate quality, but currently in low landscape value due to small size; significant component of group in which it stands.	B (12)
85	English oak	17m	1950mm ivy	N 12m E 6m S 8.5m SW 12m W 11m NW 14m	2m	N 3m E 2m S 2m W 2m	Veteran	Below average	Indifferent	Part of group of boundary trees situated along bridleway BARK11; prominent buttress roots; single trunk; ivy-covered; historic storm damage in crown extend of internal decay from ground level; internal heartwood exposed at SE from base to 7m showing cracking and hollowing; asymmetric crown; deadwood up to 250mm in lower crown; slightly reduced shoot extension growths; dieback at branch tips in upper crown; notable tree; readily visible from bridleway BARK11; contributes to boundary screening; significant component of group in which it stands.	A (23)
86	English oak	17m	1050mm ivy est.	N 9m E 11m S 11m W 10m	2m	2m	Mature	Average	Moderate	Situated at the edge of ditch; full basal inspection prevented by dense understorey and boundary fencing; prominent buttress roots; single trunk; ivy-covered; twin-stemmed from 2m; E stem multi-stemmed at 4m; tensile unions throughout crown, where visible; no significant defects observed; generally showing characteristics typical of the species; readily visible from bridleway BARK11; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
87	English oak	13m	420mm ivy 290mm 380mm 250mm 260mm all est.	N 8m E 9m S 7m W 9m	0.5m	2m	Semi-mature	Average	Indifferent	Situated at the edge of ditch; full basal inspection prevented by dense understorey and boundary fencing; ivy-covered; multi-stemmed from 0.5m; acute main unions with no bark to bark contact; tensile unions throughout rest of the crown, where visible; minimal deadwood; generally showing characteristics typical of the species; readily visible from bridleway BARK11; significant component of group in which it stands.	B (12)
88	English oak	17m	1080mm ivy	N 9m E 10.5m S 10m W 10m	2m	2m	Mature	Average	Moderate	Off site tree; situated at the edge of ditch; prominent buttress roots; single trunk; ivy-covered; multi-stemmed from 2m; crossing and rubbing branches throughout structure; no significant defect observed; readily visible from bridleway BARK11; significant component of group in which it stands.	B (12)
89	Hybrid black poplar	24m	2 stems @ 400mm 650mm 750mm all ivy est.	N 10m E 8m S 9m W 8m	0m	2m	Mature	Average	Indifferent	Off site tree; multi-stemmed from base; ivy-covered; drawn up specimen; of dominant canopy; readily visible from bridleway BARK11; significant component of group in which it stands.	B (12)
90	Atlas Cedar	14m	550mm est.	6m	1.5m	1m	Semi-mature	Average	Moderate	Off site tree; situated at the rear garden of adjacent property; single trunk; trunk bifurcation at 2m; contributes to boundary screening; of low landscape value due to small size.	C (12)
91-94	English oak	#91 15m #92 15m #93 15m #94 20m	#91 380mm #92 470mm ivy 2 stems @ 290mm #93 490mm #93 180mm #94 680mm all est.	9m	2m	1m	Semi-mature	Average	Indifferent	Off site trees; #93 slightly sparsely foliated, crown density reduction of 20%; tensile unions throughout crown, where visible; minimal deadwood; generally showing characteristics typical of the species; contributes to boundary screening; form a screen from adjacent properties; significant components of the group in which they stand.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
95-100	English oak	#95 13m #96 12m #97 12m #98 14m #99 10m #100 10m	#95 420mm ivy #96 360mm #97 420mm 480mm both est. #98 470mm est. #99 250mm #100 400mm est.	N 7m E 7m S 7m W 6.5m	2.5m	2m	Semi-mature	Average	Moderate	Situated along the drain; full basal inspection prevented by dense understorey; tensile unions throughout crown, where visible; part of aerodynamic group with meshing crowns providing companion shelter; no significant defects observed; contributes to boundary screening; screening in views from footpath BARK10A to S; significant components of the group in which they stand.	B (12)
101-103	English oak	#101 16m #102 12m #103 12m	#101 620mm ivy #102 640mm ivy #103 300mm all est.	N 7m E 7m S 7.5m W 6.5m	1.5m	1.5m	Semi-mature	Average	Moderate	Situated at the edge of drain; full basal inspection prevented by dense understorey; tensile unions throughout crown, where visible; part of aerodynamic group with meshing crowns providing companion shelter; no significant defects observed; contributes to boundary screening; screen in views from footpath BARK10A to S; significant components of the group in which they stand.	B (12)
104-106	English oak	#104 14m #105 15m #106 13m	#104 480mm 370mm #105 310mm 420mm 290mm 320mm #106 670mm	N 9m E 7.5m S 8m W 8m	0.5m	1m	Semi-mature	Average	Indifferent	Situated along the edge of drain; prominent buttress roots; 104 twin-stemmed from base; 105 multi-stemmed from base; tensile unions throughout crown, where visible; minimal deadwood; generally showing characteristics typical of the species; contributes to boundary screening; significant components of the group in which they stand.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
107-111	English oak	#107 12m #108 14m #109 15m #110 15m #111 14m	#107 370mm #108 400mm est. #109 435mm #110 355mm #111 405mm ivy	NE 4.5m SE 7m SW 4m NW 7m	2.5m	2m	Semi-mature	Average	Indifferent	Situated along the edge of drain; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; minimal deadwood; generally showing characteristics typical of the species; contributes to boundary screening; significant components of the group in which they stand.	B (12)
112	English oak	16m	3 stems @ 700mm ivy est.	7m	0m	5m	Over-mature	Dead	Poor	Moribund.	U
113-117	English oak	#113 11m #114 14m #115 14m #116 15m #117 13m	#113 280mm 260mm both est. #114 520mm 480mm #115 580mm #116 620mm 640mm #117 400mm 390mm	NE 7.5m SE 8m SW 8m NW 8.5m	0.5m	1.5m	Semi-mature	Average	Indifferent	Situated along the edge of drain; #114 E stem significant tear-out wound with exposed heartwood at 1.5m; 1.2m length, 200mm wide with occluding woundwood formed on the periphery; tensile unions throughout crown, where visible; drawn-up and mutually suppressed; aerodynamic group with meshing crowns providing companion shelter; #116 broken branches hung up in crown;# minimal deadwood; generally showing characteristics typical of the species; contributes to boundary screening; significant components of the group in which they stand.	B (12)
118	Silver birch	13m	225mm 240mm	6m	0m	2m	Semi-mature	Average	Indifferent	Situated at the edge of drain; twin stemmed from base; tensile unions throughout crown, where visible; no significant defects observed; readily visible from footpath BARK10A; short-lived species; significant component of group in which it stands.	C (12)
119	English oak	16m	1060mm ivy est.	N 10m E 9.5m S 10m SW 10.5m W 11m	5m	3m	Over-mature	Below average	Indifferent	Situated at the edge of stream; full basal inspection impeded; single trunk; wound with exposed heartwood from base to 4.5m, 300mm wide, facing SW; above average dead wood in crown; deadwood up to 180mm in diameter, est.; sparsely foliated; crown density reduction of 40%; visible in long views from footpath BARK10A; significant component of group in which it stands.	B (23)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
120	English oak	12m	750mm est.	N 8m E 6m S 6m W 9m	2.5m	1m	Mature	Below average	Moderate	Off site tree; full basal inspection prevented by dense understorey cover and boundary fencing; tensile unions throughout crown, where visible; minor dieback at branch tips; slightly sparsely foliated; crown density reduction of 10 %; significant component of group in which it stands.	B (12)
121	English oak	10m	410mm	NE 6m SE 5m SW 5m NW 6m	1.75m	1.5m	Semi-mature	Average	Moderate	Situated at the edge of stream; full basal inspection prevented by dense understorey; twin-stemmed from 1.75m; natural brace forming at 2m; tensile unions throughout crown, where visible; visible in narrow, long views from footpath BARK10A; contributes to boundary screening; of moderate quality, but currently in low landscape value due to small size; significant component of group in which it stands.	B (1)
122-124	English oak	#122 11m #123 12m #124 9m	#122 775mm #123 780mm ivy #124 680mm est.	NE 7.5m SE 9m SW 8.5m NW 8m	1.5m	1.5m	Mature	Average	Moderate	Situated at the edge of stream; full basal inspection impeded; #122 multi-stemmed from 1.5m; #123 twin-stemmed from 2m; #124 twin-stemmed from 1m; tensile unions throughout crown, where visible; minimal deadwood; of squat domed form; visible in narrow, long views from footpath BARK10A; contribute to boundary screening; significant component of group in which it stands.	B (12)
125	English oak	14m	980mm ivy	NE 9m SE 11m SW 10.5m NW 8m	2.5m	1.5m	Mature	Average	Moderate	Situated at the edge of stream; prominent buttress roots; single trunk; multi-stemmed from 2.5m; tensile unions throughout crown, where visible; generally showing characteristics typical of the species; visible in narrow, long views from footpath BARK10A; contributes to boundary screening; significant component of group in which it stands.	B (12)
126	English oak	12m	680mm ivy	NE 6m SE 4.5m SW 7m NW 6m	NW 1.5m	1.5m	Semi-mature	Below average	Moderate	Situated at the edge of stream; prominent buttress roots; single trunk; ivy-covered; asymmetric crown as suppressed by adjacent specimens; minor dieback at branch tips; slightly sparsely foliated; crown density reduction of 15%; visible in narrow, long views from footpath BARK10A; contributes to boundary screening; significant component of group in which it stands.	B (2)
127	Ash	11m	3 stems @ 360mm 420mm 470mm all est.	NE 8m SE 9m SW 7.5m NW 7m	0m	1.5m	Semi-mature	Below average	Indifferent	Situated at the edge of stream; full basal inspection prevented by dense understorey; multi-stemmed from base; minor dieback at branch tips, consistent with ash-dieback disease; slightly sparsely foliated; crown density reduction of 20%; visible in narrow, long views from footpath BARK10A; of short-term potential; significant component of group in which it stands.	C (2)
128	English oak	14m	860mm ivy est.	NE 8m SE 9m SW 9m NW 8m	3m	1.5m	Mature	Average	Moderate	Situated at the side ditch; full basal inspection impeded; single trunk; ivy-covered; multi-stemmed from 3m; tensile unions throughout crown, where visible; minimal deadwood; generally showing characteristics typical of the species; readily visible from footpath BARK10; contributes to boundary screening; significant component of group in which it stands.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
129	English oak	14m	990mm ivy est.	NE 8.5m SE 9.5m SW 9m NW 8.5m	1.5m	1.5m	Mature	Average	Moderate	Situated at the side ditch; full basal inspection impeded; single trunk; ivy-covered; multi-stemmed from 1.5m; tensile unions throughout crown, where visible; snapped out limbs at 2m SE with branch tips leaning on ground level; minimal deadwood; generally showing characteristics typical of the species; readily visible from footpath BARK10; contributes to boundary screening; significant component of group in which it stands.	B (12)
130	English oak	16m	1250mm est.	NE 8.5m SE 8m SW 8m NW 8.5m	2m	2m	Over-mature	Low	Indifferent	Situated at the side ditch; full basal inspection impeded; single trunk; ivy-covered; multi-stemmed from 4m; above average dead wood in crown; deadwood up to 450mm in diameter, est.; sparsely foliated; crown density reduction of 60%; readily visible from footpath BARK10; significant component of group in which it stands.	C (23)
131	English oak	16m	1180mm ivy est.	NE 6m SE 8m SW 7m NW 6.5m	3m	2m	Over-mature	Below average	Indifferent	Situated at the side ditch; full basal inspection impeded; single trunk; ivy-covered; wound with exposed heartwood at base and 1.5m of trunk NW; slight difference in tone when NW side of trunk tapped with acoustic hammer suggest internal decay; multi-stemmed from 4m; above average dead wood in crown; deadwood up to 350mm in diameter, est.; stems failure at 6m resulting tear-out wounds at apex; sparsely foliated; crown density reduction of 35%; readily visible from footpath BARK10; significant component of group in which it stands.	C (23)
132	English oak	10m	380mm ivy est.	6m	3m	2.5m	Semi-mature	Average	Moderate	Situated at the edge of stream; full basal inspection impeded; single trunk; ivy-covered; twin-stemmed from 3m; tensile unions throughout crown, where visible; generally showing characteristics typical of the species; visible in long views from footpath BARK10; of moderate quality, but currently in low landscape value due to small size; significant component of group in which it stands.	B (1)
133	English oak	16m	940mm ivy	N 7m E 8m S 9m W 8m	N 2m	2m	Mature	Average	Moderate	Situated at the edge of stream; single trunk; ivy-covered; twin-stemmed from 5m; tensile unions throughout crown, where visible; minimal deadwood; generally showing characteristics typical of the species; visible in narrow, long views from footpath BARK10; contributes to boundary screening; significant component of group in which it stands.	B (12)
134	Ash	14m	350mm 680mm all ivy est.	N 6m E 7m S 7m W 7m	0m	2m	Semi-mature	Average	Indifferent	Situated at the edge of stream; full basal inspection prevented by dense understorey; twin stemmed from base; heavily ivy-covered; tensile unions throughout crown, where visible; no significant defects observed; visible in narrow, long views from footpath BARK10; contributes to boundary screening; significant component of group in which it stands.	B (12)
135-136	English oak	11m	#135 660mm #136 600mm all ivy est.	N 7m E 8m S 9m W 8m	1m	2m	Semi-mature	Average	Moderate	Situated at the edge of stream; single trunk; ivy-covered; tensile unions throughout crown, where visible; of squat domed form; minimal deadwood; aerodynamic group with meshing crowns providing companion shelter; visible in narrow, long views from footpath BARK10; of moderate quality, but currently in low landscape value due to small sizes; significant component of group in which they stand.	B (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
137	English oak	17m	1550mm ivy est.	N 9m E 12m SE 11.5m S 11m W 10m	3m	2.5m	Mature	Average	Moderate	Off site tree; situated at the edge of stream; full basal inspection impeded; single trunk; ivy-covered; twin-stemmed from 3m; tensile unions throughout crown, where visible; minimal deadwood; generally showing characteristics typical of the species; notable tree; visible in narrow, long views from footpath BARK10; contributes to boundary screening; significant component of group in which it stands.	B (12)
138	Crack willow	12m	2 stems @ 500mm est.	N 7m E 11m S 8m W 8m	0m	0.5m	Semi-mature	Below average	Poor	Situated at the edge of stream; full basal inspection impeded; broken branches hung up in crown; of poor structure condition; obscured from public views; inessential component of group in which it stands.	C (1)
139	English oak	15m	1360mm ivy est.	N 9m E 12m SE 10m S 10m W 10m	3m	2.5m	Mature	Average	Moderate	Situated at the edge of stream; full basal inspection impeded; prominent buttress roots; single trunk; ivy-covered; multi-stemmed from 4.5m; tensile unions throughout crown, where visible; minimal deadwood; generally showing characteristics typical of the species; notable tree; visible in narrow, long views from unnamed road to S and public footpath BARK10 to NW; contributes to boundary screening; significant component of group in which it stands.	B (12)
140	English oak	16m	1420mm ivy est.	NE 8m SE 7m SW 7m NW 8m	5m	6m	Over-mature	Low	Indifferent	Situated at the edge stream; full basal inspection prevented by dense understorey; single trunk; ivy-covered; multi-stemmed from 5m; above average dead wood in crown; deadwood up to 450mm in diameter, est.; sparsely foliated; crown density reduction of 60%; visible in narrow, long views from unnamed road to S and public footpath BARK10 to NW; significant component of group in which it stands.	C (23)
141	English oak	18m	1470mm ivy est.	N 9m E 6m S 8m W 8m NW 9.5m	2m	2.5m	Mature	Average	Moderate	Full basal inspection prevented by dense understorey; prominent buttress roots; single trunk; ivy-covered; tensile unions throughout crown, where visible; dominant canopy; generally showing characteristics typical of the species; notable tree; readily visible from footpath; contributes to boundary screening; significant component of group in which it stands.	B (12)
142	English oak	15m	1470mm ivy	N 9m E 6m SE 9m S 11m W 8m	2m	3m	Mature	Average	Moderate	Prominent buttress roots; single trunk; ivy-covered; tensile unions throughout crown, where visible; of domed form; no significant defects observed; generally showing characteristics typical of the species; notable tree; readily visible from footpath BARK10; contributes to boundary screening; significant component of group in which it stands.	C (2)
G1	Blackthorn	4m	Max 290mm	4.3m	1.8m	0m	Mature	Average	Indifferent	No significant defects observed at bases; partially smothered in bramble; crossing and rubbing branches throughout structures; tensile unions throughout crowns; failed branches and stems throughout; visible from footpath to S; of only low-level screening value; of low quality and limited arboricultural value; inessential feature of the landscape.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
G2	Blackthorn	4.5m	Max 215mm	4m	0.5m	0m	Mature	Average	Indifferent	No significant defects observed at bases; acute main unions with external features suggesting included bark; crossing and rubbing branches throughout structures; minor deadwood throughout crown, consistent with age and species; failed stems and braces throughout; hidden in the majority of long directed public view; of only low-level screening value; inessential feature of the landscape.	C (1)
G3	Various	5m	Max 335mm	3m	0.5m	0.5m	Mature	Below average	Indifferent	Species include holly, hawthorn, elder and blackthorn; approx. 10 individuals; hawthorn dominant; partially smothered in bramble; extensive decay and unidentifiable fungal fruiting bodies at bases of two most prominent hawthorn specimens; deadwood up to 150mm in diameter, est.; no significant defects observed at bases of rest of group; crossing and rubbing branches throughout structures; hidden in the majority of long directed public view; of only low-level screening value; inessential feature of the landscape.	C (1)
G4	Various	Max 9m Avg 3.5m	Max 280mm Avg 100mm est.	2.5m	0.5m	0m	Mature	Average	Indifferent	Row of closely planted specimens, designed to form a hedge or screen; species include holly, hawthorn, blackthorn and elder; relatively even distribution of species; approx. 50 individuals; no significant defects observed at bases; crossing and rubbing branches throughout structures; minor deadwood throughout crowns, consistent with age and species; minor branch failures throughout; visible in glimpses from nearby properties but otherwise hidden in the majority of public view; acts as field boundary; contributes to boundary screening.	C (2)
G5	Hawthorn	4m	Max 5 stems @ 100mm est.	2m	0.5m	0.5m	Mature	Average	Moderate	Made up of 4 individuals scattered along boundary line; all multi-stemmed from base; partially smothered in bramble; acute main unions with tensile unions throughout rest of crowns; minor deadwood throughout crowns, consistent with age and species; crossing and rubbing branches throughout structures; visible in glimpses from nearby properties and Barkham Ride but otherwise hidden in the majority of public view; of moderate quality, but currently of low value due to small size; of only low-level screening value.	C (1)
G6	Various	4m	Max 290mm ivy est.	3m	1m	0.5m	Semi-mature	Below average	Indifferent	Access to trees restricted by dense vegetation, drainage ditch and boundary fence; 5 individuals; species include flowering cherry, hazel and elder; smothered in bramble; full basal inspection prevented by dense ivy cover and boundary fence; heavily ivy covered; most multi-stemmed from base; above average dead wood in crowns; readily visible from Barkham Ride; of only low-level screening value; unremarkable trees of very limited merit; inessential feature of the landscape.	C (2)
G7	Hazel	4m	Max 100mm est.	3.2m	0.5m	0.5m	Mature	Average	Indifferent	Group made up of 3 individuals; partially smothered in bramble; full basal inspection prevented by dense ivy cover, vegetation and boundary fence; partially ivy covered; all multi-stemmed from base; crossing and rubbing branches throughout structures; lapsed coppice; readily visible from Barkham Ride; contributes to boundary screening; of low quality and limited arboricultural value.	C (2)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
G8	Hazel	4m	Avg 100mm	3m	0.5m	0.5m	Mature	Average	Indifferent	Group made up of 3 individuals; full basal inspection prevented by dense vegetation and boundary fence; partially ivy covered; all multi-stemmed from base; crossing and rubbing branches throughout structures; lapsed coppice; readily visible from Barkham Ride; contributes to boundary screening; of low quality and limited arboricultural value.	C (2)
G9	Various	Max 8m Avg 4m	Max 200mm est.	2.5m	0.5m	0m	Mature	Average	Moderate	Full basal inspection prevented by dense vegetation and boundary fence; partially smothered in bramble; species include holly, hazel and blackthorn; holly dominant; 6 individuals; tensile unions throughout crowns; crossing and rubbing branches throughout structures; readily visible from Barkham Ride; contributes to boundary screening; inessential feature of the landscape.	C (2)
G10	Various	Max 14m Avg 4m	Max 300mm est. Avg 150mm	5m	0.5m	0.5m	Mature	Average	Indifferent	Species include English oak, goat willow, hazel, hawthorn, blackthorn and silver birch; approx. 100 individuals; relatively even distribution of species; no significant defects observed at bases; young self seeded specimens scattered throughout; crossing and rubbing branches throughout structures; no significant defects observed; visible in glimpses from nearby properties and Barkham Ride but otherwise hidden in the majority of public view; acts as field boundary; contributes to boundary screening.	C (12)
G20	Various	Max 25m Avg 18m	Max 980mm est. Avg 670mm	N 8m E 6m S 6m W 6m	3m	2m	Mature	Average	Moderate	Tree belt situated along bridleway BARK14; English oak dominant with scattered hornbeam, ash, hawthorn, holly and dense understorey; approx. 100 individuals; group of drawn-up, mutually suppressed specimens; aerodynamic group with meshing crowns providing companion shelter; readily visible from bridleway BARK14; contribute to boundary screening; significant component of group in which they stand.	A (12)
G21	Various	Max 7m Avg 1m	Max 4 stems @ 80mm Avg 4 stems @ 60mm all est.	2m	0m	0m	Young	Below average	Indifferent	Row of closely growing specimens along the side ditch; species include hawthorn, goat willow, English elm, brambles and blackthorn; of only low-level screening value.	C (2)
G22	Various	Max 6m Avg 4m	Max 200mm Avg 160mm all est.	2m	0m	0m	Semi-mature	Below average	Indifferent	Row of closely growing specimens, forming a screen of the road access to the site; species include field maple, hawthorn, blackthorn, elder, English elm and dense understorey; appear to be regularly managed; contribute to boundary screening.	C (2)
G23	Various	Max 23m Avg 13m	Max 650mm Avg 400mm all est.	4m	0m	0.5m	Semi-mature	Average	Indifferent	Species include hybrid black poplar, English elm, field maple, hornbeam, hawthorn, ash, sycamore and flowering cherry; approx. 150 individuals; group of drawn-up, mutually suppressed specimens; drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed; aerodynamic group with meshing crowns providing companion shelter; contributes to boundary screening.	B (12)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
G24	Various	Max 13m Avg 10m	Max 500mm Avg 320mm all est.	4m	0m	0m	Semi-mature	Below average	Indifferent	Species include English oak, sycamore, ash, field maple, horse chestnut, hawthorn, holly and dense understorey; approx. 180 individuals; visible in glimpse views from Commonfield Lane; contribute to boundary screening; forms green feature along Commonfield Lane to E; tree conferring no significantly greater value on group in which it stands.	B (2)
G25	Various	Max 5m Avg 4m	Avg 5 stems @ 80mm	2m	0m	0m	Young	Below average	Indifferent	Row of closely growing specimens, forming a hedge or screen; hawthorn and English elm dominant with scattered goat willow; approx. 70 individuals; visible in glimpse views from Barkham Ride; of only low-level screening value.	C (2)
G26	Various	Avg 3m Avg 4m	Avg 3 stems @ 100mm	2m	0m	0m	Young	Below average	Indifferent	Row of closely growing specimens, forming a hedge or screen; species include Hawthorn, English elm and blackthorn; approx. 90 individuals; of only low-level screening value.	C (2)
G27	Various	Max 13m Avg 6m	Max 480mm Avg 200mm all est.	3m	0m	0m	Semi-mature	Below average	Indifferent	Double row of specimens, forming an avenue along bridleway BARK11; species include hawthorn, blackthorn, ash and English oak; visible in glimpse views from bridleway BARK11; contributes to boundary screening.	C (2)
G28	Various	Avg 13m	Max 480mm Avg 200mm	3m	0m	0m	Semi-mature	Below average	Indifferent	Off site group of trees growing along the boundary of adjacent properties; species include hawthorn, Lawson cypress, poplar, blackthorn, English oak and dense understorey; contribute to boundary screening; screening in view from adjacent properties.	C (2)
G29	English oak	Max 10m Avg 6m	Max 350mm Avg 300mm all est.	6m	2.5m	1m	Semi-mature	Below average	Indifferent	3 individuals growing under the power line; full basal inspection impeded by drain; appear to be regularly managed; historically topped at 5m to avoid conflict with the overhead power line; readily visible from footpath BARK10A; contributes to boundary screening.	C (2)
G30	Various	Max 13m Avg 7m	Max 400mm Avg 220mm all est.	3m	0m	0m	Semi-mature	Below average	Indifferent	Off site group of trees; species include ash, hawthorn and dense understorey; visible in glimpse views from footpath BARK10A; of low quality and limited arboricultural value.	C (2)
G31	Various	Max 20m Avg 16m	Max 500mm Avg 400mm all est.	5m	0m	1m	Semi-mature	Average	Indifferent	Off site group of trees; species include ash, English oak, sycamore, hawthorn and goat willow; group of drawn-up, mutually suppressed specimens; drawn-up specimen with Height/Diameter ratio greater than 50: at risk of failure if companion shelter removed; aerodynamic group with meshing crowns providing companion shelter; readily visible from footpath BARK10A; significant feature of the landscape.	B (12)
G32	Various	Max 5m Avg 2m	Avg 6 stems @ 50mm	2m	0m	0m	Young	Below average	Indifferent	Row of closely growing specimens, forming a hedge or screen; species include English elm and goat willow; of only low-level screening value.	C (1)

No.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physiology	Structure	Comments	Category
G33	English oak	Max 10m Avg 9m	Max 2 stems @ 420mm Avg 380mm all ivy est.	8m	0.5m	1m	Semi-mature	Average	Indifferent	Group of mutually suppressed specimens growing along the stream; comprised of 5 individuals; tensile unions throughout crown, where visible; of squat domed form; aerodynamic group with meshing crowns providing companion shelter; of moderate quality, but currently of low landscape value due to small size.	B (1)
G34	Various	Max 7m Avg 6m	Max 300mm Avg 150mm all est.	2m	0m	0m	Semi-mature	Below average	Indifferent	Row of closely growing specimens, forming a hedge or screen; species include hawthorn, blackthorn, ash, English elm and dense bramble understorey; readily visible from public footpath BARK10; contributes to boundary screening.	C (2)
G35	Various	Max 12m Avg 7m	Max 480mm Avg 250mm all est.	3m	0m	0m	Semi-mature	Below average	Indifferent	Row of closely growing specimens, forming a hedge or screen; species include ash, crack willow, sycamore, English oak, goat willow, hawthorn, holly, English elm with occasional dead individuals and dense bramble understorey; contributes to boundary screening; lower quality individuals conferring greater value as part of a group.	C (2)
G36	Various	Max 12m Avg 8m	Max 500mm Avg 320mm all est.	3m	0m	0m	Semi-mature	Below average	Indifferent	Species include, English oak, ash, sycamore, Lawson cypress, hawthorn and dense bramble understorey; group of drawn-up, mutually suppressed specimens; readily visible from footpath BARK10; contributes to boundary screening; screening in views from adjacent St James's Church to the site; lower quality individuals conferring greater value as part of a group.	C (2)
G37	Various	Max 7m Avg 5m	Max 300mm Avg 150mm all est.	2m	0m	0m	Semi-mature	Below average	Indifferent	Row of closely growing specimens, forming a hedge or screen; species include hawthorn dominant with scattered blackthorn, ash, English oak; readily visible from public footpath BARK10A to S; contributes to boundary screening.	C (2)
H1	Hawthorn	3.5m	Max 100mm est.	1m	0.5m	0.5m	Semi-mature	Average	Indifferent	Group mainly comprised of bramble but hawthorn dominant; no significant defects observed at bases; crossing and rubbing branches throughout structures; historically managed but now lapsed; tensile unions throughout crowns; row of closely planted specimens, designed to form a hedge or screen; visible in glimpses from Barkham Ride; inessential feature of the landscape; acts as field boundary.	C (1)
H2	Hawthorn	2m	Avg 5 stems @ 40mm	1m	0m	0m	Young	Below average	Indifferent	Row of closely planted specimens, designed to form a hedge or screen; appear to be regularly managed; of only low-level screening value.	C (1)

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.

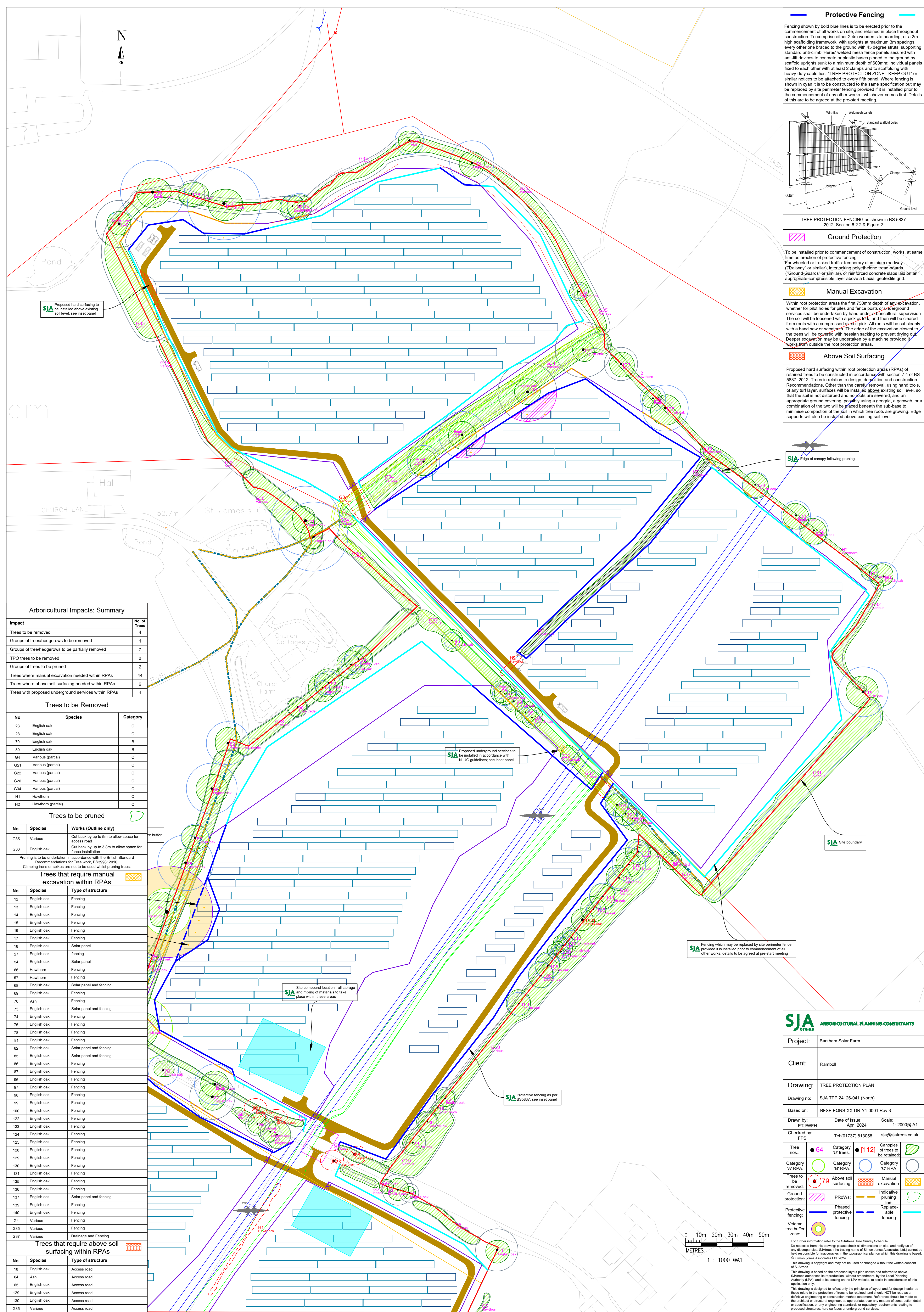
<i>Tree No.</i>	<i>Species</i>	<i>RPA</i>	<i>RPA Radius</i>
1	Hawthorn	117.3m ²	6.1m
2	English oak	706.9m ²	15.0m
3	English oak	131.9m ²	6.5m
4	English oak	706.9m ²	15.0m
5-9	English oak	447.9m ²	11.9m
		706.9m ²	15.0m
		319.2m ²	10.1m
		304.2m ²	9.8m
		296.8m ²	9.7m
10	English oak	434.5m ²	11.8m
11	English oak	470.7m ²	12.2m
12	English oak	247.7m ²	8.9m
13	English oak	319.2m ²	10.1m
14	English oak	461.5m ²	12.1m
15-17	English oak	120.0m ²	6.2m
		201.0m ²	8.0m
		122.3m ²	6.2m
18	English oak	706.9m ²	15.0m
19	English oak	366.4m ²	10.8m
20	English oak	114.0m ²	6.0m
21	English oak	311.7m ²	10.0m
22	English oak	40.7m ²	3.6m
23	English oak	508.3m ²	12.7m
24	English oak	247.7m ²	8.9m
25	English oak	127.1m ²	6.4m
26	English oak	179.6m ²	7.6m
27	English oak	651.4m ²	14.4m
28	English oak	221.7m ²	8.4m
29	English oak	215.4m ²	8.3m
30	Goat willow	113.1m ²	6.0m
31	Silver birch	46.3m ²	3.8m
32	English oak	158.0m ²	7.1m
50	Ash	70.6m ²	4.7m
51	English oak	50.1m ²	4.0m
52	Goat willow	207.6m ²	8.1m
53	English oak	87.6m ²	5.3m
54	English oak	395.5m ²	11.2m
55	English oak	157.5m ²	7.1m
56	English oak	152.2m ²	7.0m
57	English oak	89.6m ²	5.3m
58	English oak	74.2m ²	4.9m
59	English oak	127.1m ²	6.4m
60	English oak	65.3m ²	4.6m
61	English oak	60.3m ²	4.4m

62	Ash	54.9m ²	4.2m
63	English oak	185.3m ²	7.7m
64	Ash	203.6m ²	8.0m
65	English oak	196.0m ²	7.9m
66	Hawthorn	32.8m ²	3.2m
67	Hawthorn	22.6m ²	2.7m
68	English oak	695.6m ²	14.9m
69	English oak	542.4m ²	13.1m
70	Ash	197.1m ²	7.9m
71	English oak	72.4m ²	4.8m
72	English oak	209.2m ²	8.2m
73	English oak	706.9m ²	15.0m
74	English oak	293.2m ²	9.7m
75	Ash	187.0m ²	7.7m
76	English oak	706.9m ²	15.0m
77	English oak	199.6m ²	8.0m
78	English oak	296.8m ²	9.7m
79	English oak	77.9m ²	5.0m
80	English oak	106.4m ²	5.8m
81	English oak	527.7m ²	13.0m
82	English oak	706.9m ²	15.0m
83	English oak	88.4m ²	5.3m
84	English oak	104.2m ²	5.8m
85	English oak	706.9m ²	15.0m
86	English oak	498.8m ²	12.6m
87	English oak	242.0m ²	8.8m
88	English oak	527.7m ²	13.0m
89	Hybrid black poplar	590.4m ²	13.7m
90	Atlas Cedar	136.8m ²	6.6m
91-94	English oak	65.3m ² 176.0m ² 123.3m ² 209.2m ²	4.6m 7.5m 6.3m 8.2m
95-100	English oak	79.8m ² 58.6m ² 184.0m ² 99.9m ² 28.3m ² 72.4m ²	5.0m 4.3m 7.7m 5.6m 3.0m 4.8m
101-103	English oak	173.9m ² 185.3m ² 40.7m ²	7.4m 7.7m 3.6m
104-106	English oak	166.2m ² 207.6m ² 203.1m ²	7.3m 8.1m 8.0m
107-111	English oak	61.9m ² 72.4m ² 85.6m ² 57.0m ² 74.2m ²	4.4m 4.8m 5.2m 4.3m 4.9m
112	English oak	665.0m ²	14.5m
113-117	English oak	66.0m ² 226.6m ² 152.2m ² 359.2m ² 141.2m ²	4.6m 8.5m 7.0m 10.7m 6.7m
118	Silver birch	49.0m ²	3.9m
119	English oak	508.3m ²	12.7m

120	English oak	254.5m ²	9.0m
121	English oak	76.0m ²	4.9m
122-124	English oak	271.7m ² 275.2m ² 209.2m ²	9.3m 9.4m 8.2m
125	English oak	434.5m ²	11.8m
126	English oak	209.2m ²	8.2m
127	Ash	355.6m ²	10.6m
128	English oak	334.6m ²	10.3m
129	English oak	443.4m ²	11.9m
130	English oak	706.9m ²	15.0m
131	English oak	629.9m ²	14.2m
132	English oak	65.3m ²	4.6m
133	English oak	399.7m ²	11.3m
134	Ash	264.6m ²	9.2m
135-136	English oak	197.1m ² 162.9m ²	7.9m 7.2m
137	English oak	706.9m ²	15.0m
138	Crack willow	226.2m ²	8.5m
139	English oak	706.9m ²	15.0m
140	English oak	706.9m ²	15.0m
141	English oak	706.9m ²	15.0m
142	English oak	706.9m ²	15.0m
G1	Blackthorn	38.0m ²	3.5m
G2	Blackthorn	20.9m ²	2.6m
G3	Various	50.8m ²	4.0m
G4	Various	35.5m ²	3.4m
G5	Hawthorn	4.5m ²	1.2m
G6	Various	38.0m ²	3.5m
G7	Hazel	4.5m ²	1.2m
G8	Hazel	4.5m ²	1.2m
G9	Various	18.1m ²	2.4m
G10	Various	40.7m ²	3.6m
G20	Various	434.5m ²	11.8m
G21	Various	2.9m ²	1.0m
G22	Various	18.1m ²	2.4m
G23	Various	191.1m ²	7.8m
G24	Various	113.1m ²	6.0m
G25	Various	2.9m ²	1.0m
G26	Various	4.5m ²	1.2m
G27	Various	104.2m ²	5.8m
G28	Various	0	0
G29	English oak	55.4m ²	4.2m
G30	Various	72.4m ²	4.8m
G31	Various	113.1m ²	6.0m
G32	Various	2.5m ²	0.9m
G33	English oak	79.8m ²	5.0m
G34	Various	40.7m ²	3.6m
G35	Various	104.2m ²	5.8m
G36	Various	113.1m ²	6.0m
G37	Various	40.7m ²	3.6m
H1	Hawthorn	4.5m ²	1.2m
H2	Hawthorn	2.5m ²	0.9m

APPENDIX 2

Tree Protection Plans



Arboricultural Impacts: Summary	
Impact	No. of Trees
Trees to be removed	4
Groups of trees/hedgerows to be removed	1
Groups of tree/hedgerows to be partially removed	7
TPO trees to be removed	0
Groups of trees to be pruned	2
Trees where manual excavation needed within RPAs	44
Trees where above soil surfacing needed within RPAs	6
Trees with proposed underground services within RPAs	1

Trees to be pruned		
No.	Species	Works (Outline only)
G35	Various	Cut back by up to 5m to allow space for access road
G33	English oak	Cut back by up to 3.8m to allow space for fence installation

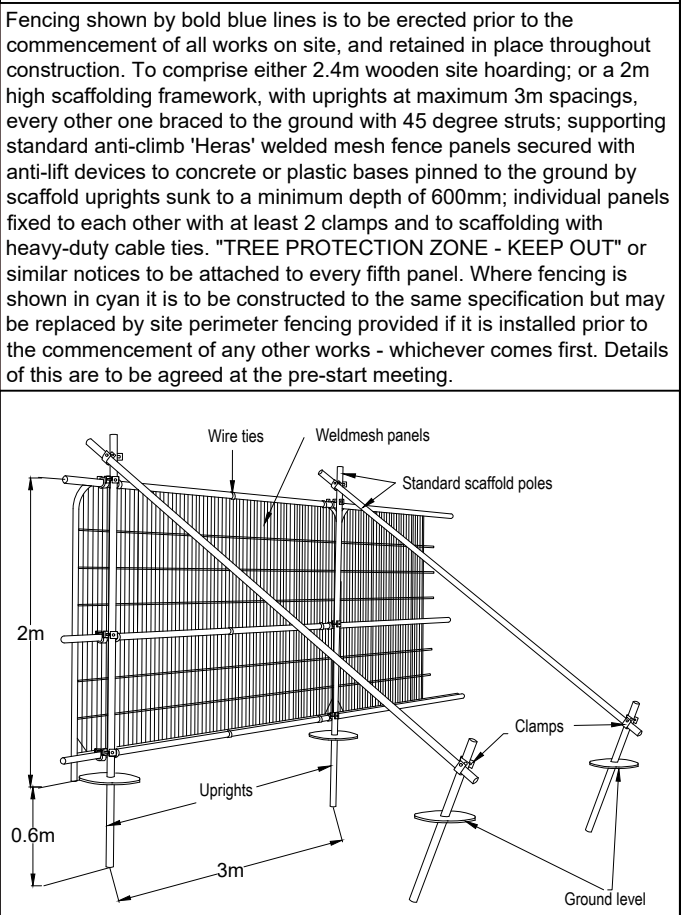
Pruning is to be undertaken in accordance with the British Standard Recommendations for Tree work, BS3998: 2010.

Climbing irons or spikes are not to be used whilst pruning trees.

Trees that require manual excavation within RPAs

Trees that require above soil surfacing within RPAs		
No.	Species	Type of structure
18	English oak	Access road
64	Ash	Access road
65	English oak	Access road
129	English oak	Access road
130	English oak	Access road
G35	Various	Access road

No.	Species	Type of structure
18	English oak	Access road
64	Ash	Access road
65	English oak	Access road
129	English oak	Access road
130	English oak	Access road
G35	Various	Access road



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

	Ground Protection
To be installed prior to commencement of construction works, at same time as erection of protective fencing. For wheeled or tracked traffic: temporary aluminium roadway ("Trakway" or similar), interlocking polyethylene tread boards ("Ground-Guards" or similar), or reinforced concrete slabs laid on an appropriate compressible layer above a biaxial geotextile grid.	

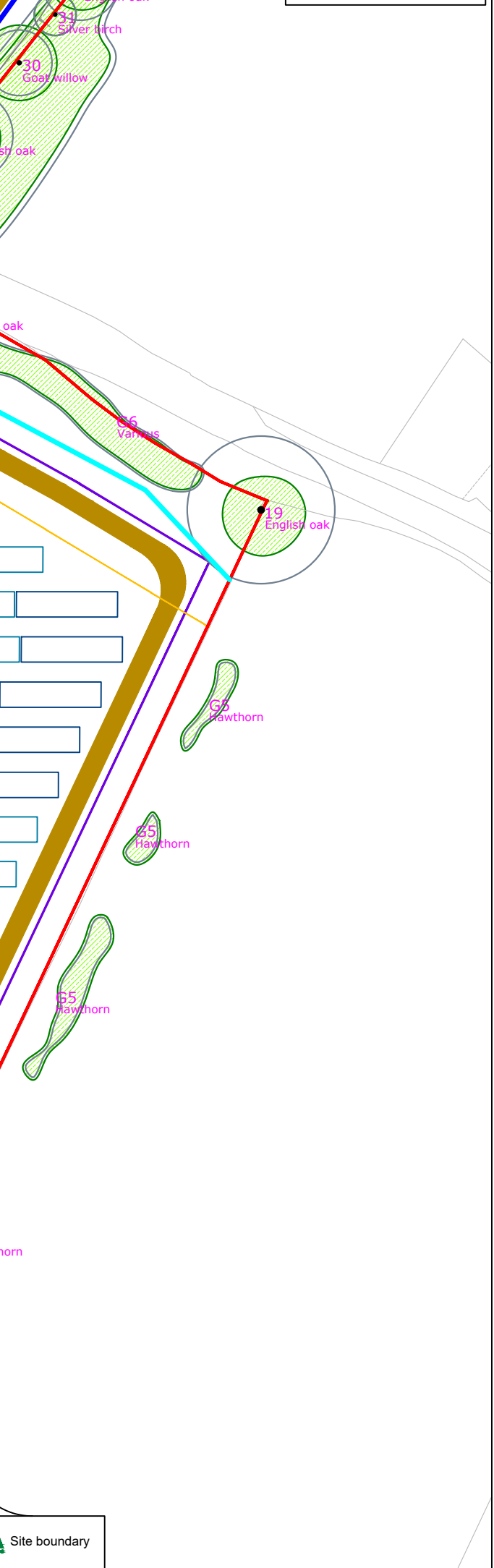
	Manual Excavation
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Within root protection areas the first 750mm depth of any excavation, whether for pilot holes for piles and fence posts or underground services shall be undertaken by hand under arboricultural supervision. The soil will be loosened 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. Deeper excavation may be undertaken by a machine provided it works from outside the root protection areas.

Proposed hard surfacing within root protection areas (RPAs) of retained trees to be constructed in accordance with section 7.4 of BS 5837: 2012. Trees in relation to design, demolition and construction - Recommendations. Other than the careful removal, using hand tools, of any turf layer, surfaces will be installed above existing soil level, 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.

SJA Protective fencing as per BS5837; see inset panel

SJA Protective fencing as per BS5837; see inset panel



Site boundary

 ARBORICULTURAL PLANNING CONSULTANTS			
Project:	Barkham Solar Farm		
Client:	Ramboll		
Drawing:	TREE PROTECTION PLAN		
Drawing no:	SJA TPP 24126-041 (Central)		
Based on:	BFSF-EQNS-XX-DR-Y1-0001 Rev 3		
Drawn by: ETJ/WFH	Date of Issue: (01/17/23)	Scale: 1: 2000@ A1	
Checked by: FFS	Tel. (01737) 813058	sja@sjatrees.co.uk	
Trees nos.:	64	Category 'U' trees:	[112] Categories of trees to be retained: 
Category 'A' RPA:	Category 'B' RPA:	Category 'C' RPA:	
Trees to be removed:	Above soil surfacing:	Indicative pruning:	Manual excavation:
			
Protective fencing:	Phased protective fencing:	Replace-able fencing:	
			
Veteran tree buffer zone:			
For further information refer to the SJA:Trees Tree Survey Schedule Do not scale from this drawing: please check all dimensions on site, and notify us of any discrepancies. SJA:Trees (the trading name of SJA:trees & Associates Ltd.) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. This drawing is copyright and may not be used or changed without the written consent of SJA:trees. This drawing is based on the proposed layout plan and shown as referred to above. SJA:trees authorises its reproduction, without amendment, by the Local Planning Authority (LPA), and by its posting on the LPA website, to assist in consideration of this application only. This drawing is designed to reflect only the principles of layout and/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 surfacing or permanent fencing.			

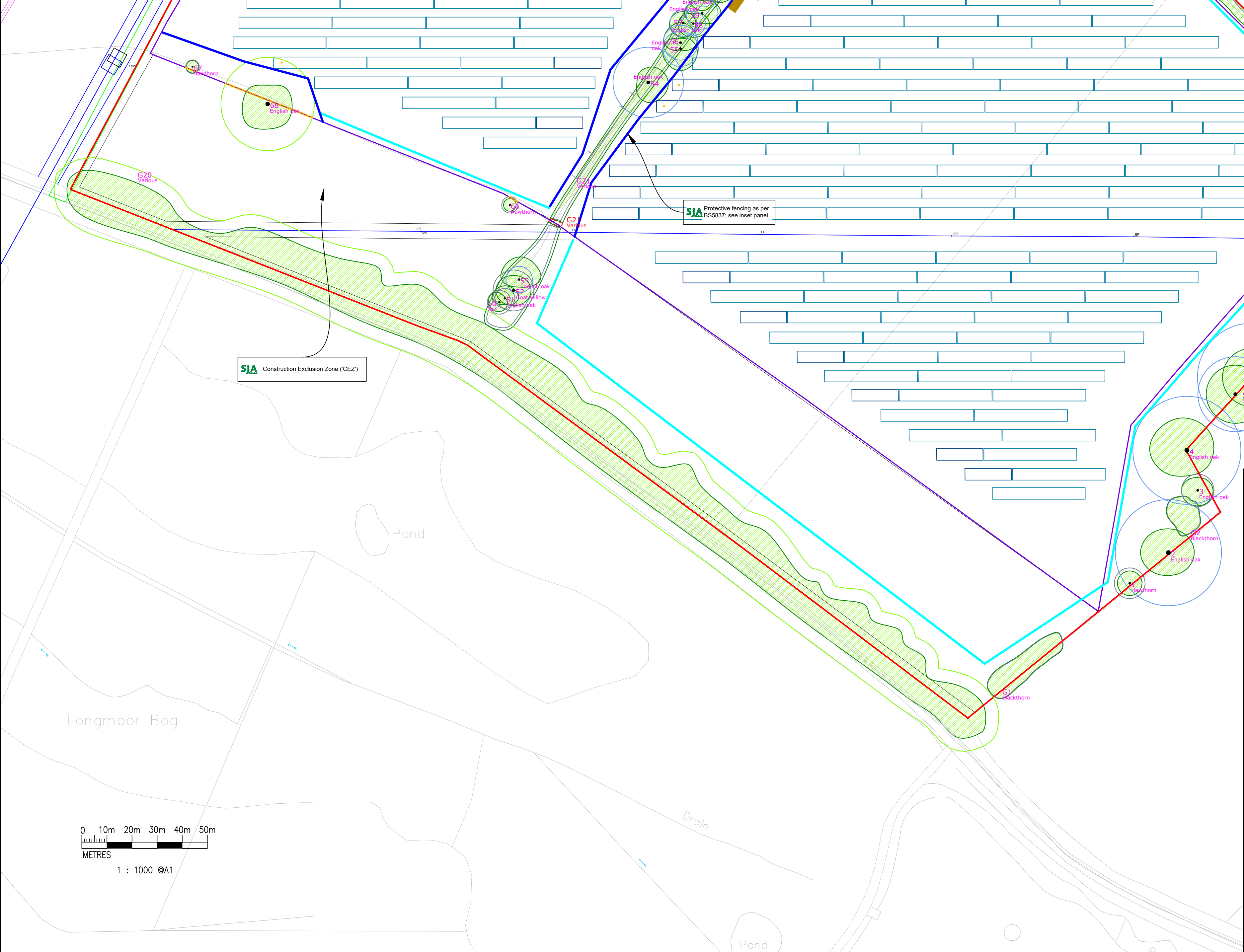
Arboricultural Impacts: Summary		
Impact		No. of Trees
Trees to be removed		4
Groups of trees/hedgerows to be removed		1
Groups of tree/hedgerows to be partially removed		7
TPO trees to be removed		0
Groups of trees to be pruned		2
Trees where manual excavation needed within RPAs		44
Trees where above soil surfacing needed within RPAs		6
Trees with proposed underground services within RPAs		1

Trees to be Removed		
No	Species	Category
23	English oak	C
28	English oak	C
79	English oak	B
80	English oak	B
G4	Various (partial)	C
G21	Various (partial)	C
G22	Various (partial)	C
G26	Various (partial)	C
G34	Various (partial)	C
H1	Hawthorn	C
H2	Hawthorn (partial)	C

Trees to be pruned		
No.	Species	Works (Outline only)
G35	Various	Cut back by up to 5m to allow space for access road
G33	English oak	Cut back by up to 3.8m to allow space for fence installation
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.		

Trees that require manual excavation within RPAs		
No.	Species	Type of structure
12	English oak	Fencing
13	English oak	Fencing
14	English oak	Fencing
15	English oak	Fencing
16	English oak	Fencing
17	English oak	Fencing
18	English oak	Solar panel
27	English oak	fencing
54	English oak	Solar panel
66	Hawthorn	Fencing
67	Hawthorn	Fencing
68	English oak	Solar panel and fencing
69	English oak	Fencing
70	Ash	Fencing
73	English oak	Solar panel and fencing
74	English oak	Fencing
76	English oak	Fencing
78	English oak	Fencing
81	English oak	Fencing
82	English oak	Solar panel and fencing
85	English oak	Solar panel and fencing
96	English oak	Fencing
97	English oak	Fencing
98	English oak	Fencing
99	English oak	Fencing
100	English oak	Fencing
122	English oak	Fencing
123	English oak	Fencing
124	English oak	Fencing
125	English oak	Fencing
128	English oak	Fencing
129	English oak	Fencing
130	English oak	Fencing
131	English oak	Fencing
135	English oak	Fencing
136	English oak	Fencing
137	English oak	Solar panel and fencing
139	English oak	Fencing
140	English oak	Fencing
G4	Various	Fencing
G35	Various	Fencing
G37	Various	Drainage and Fencing

Trees that require above soil surfacing within RPAs		
No.	Species	Type of structure
18	English oak	Access road
64	Ash	Access road
65	English oak	Access road
129	English oak	Access road
130	English oak	Access road
G35	Various	Access road



Protective Fencing

Fencing shown by bold blue lines is 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. Where fencing is shown in cyan it is to be constructed to the same specification but may be replaced by site perimeter fencing provided if it is installed prior to the commencement of any other works - whichever comes first. Details of this are to be agreed at the pre-start meeting.

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

Ground Protection

To be installed prior to commencement of construction works, at same time as erection of protective fencing.

For wheeled or tracked traffic: temporary aluminium roadways ("Trakway" or similar), interlocking polyethylene tread boards ("Ground-Guards" or similar), or reinforced concrete slabs laid on an appropriate compressible layer above a biaxial geotextile grid.

Manual Excavation

Within root protection areas the first 750mm depth of any excavation, whether for pilot holes for piles and fence posts 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. Deeper excavation may be undertaken by a machine provided it works from outside the root protection areas.

Above Soil Surfacing

Proposed hard surfacing within root protection areas (RPAs) of retained trees to be constructed in accordance with section 7.4 of BS 5837: 2012. Trees in relation to design, demolition and construction - Recommendations. Other than the careful removal, using hand tools, of any turf layer, surfaces will be installed above existing soil level, 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.

0 10m 20m 30m 40m 50m
METRES

1 : 1000 @A1

ARBORICULTURAL PLANNING CONSULTANTS

Project: Barkham Solar Farm

Client: Ramboll

Drawing: TREE PROTECTION PLAN

Drawing no: SJA TPP 24126-041 (South)

Based on: BFSF-EQNS-XX-DR-Y1-0001 Rev 3

Drawn by: ETJ/WFH	Date of Issue: April 2024	Scale: 1: 2000@ A1
Checked by: FPS	Tel: (01737) 813058	sja@sjatrees.co.uk

Tree nos.: 64	Category 'U' trees: [112]	Canopies of trees to be retained: [Diagram of tree canopy]
Category 'A' RPA: [Diagram of RPA]	Category 'B' RPA: [Diagram of RPA]	Category 'C' RPA: [Diagram of RPA]
Trees to be removed: [Diagram of trees to be removed]	Above soil surfacing: [Diagram of above soil surfacing]	Manual excavation: [Diagram of manual excavation]
Ground protection: [Diagram of ground protection]	PROWs: [Diagram of PROWs]	Indicative pruning line: [Diagram of indicative pruning line]
Protective fencing: [Diagram of protective fencing]	Phased protective fencing: [Diagram of phased protective fencing]	Replace-able fencing: [Diagram of replace-able fencing]
Veteran tree buffer zone: [Diagram of veteran tree buffer zone]		

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.

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