Arboriculture | Ecology | Landscape

DAVID ARCHER ASSOCIATES

Arboricultural Method Statement

Ponds House Farm Barn

Ponds Farm

Ponds Lane

Shere

Client: Mr & Mrs Guest

Date: November 2023

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Appendices

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1. Introduction

- 1.1 This arboricultural method statement ('AMS') details the actions to be taken in order to prevent unacceptable damage being caused to the retained trees on this and the adjacent site during the proposed single dwelling development at Ponds House Farm Barn, Ponds Farm, Ponds Lane, Shere GU5 9JL.
- 1.2 This AMS complies with the recommendations of British Standard BS 5837: 2012, *Trees in relation to design, demolition and construction Recommendations* ('BS 5837'). It is designed to reflect the principles of the tree protection required for the proposed development, and should not be read as a definitive engineering or construction statement for this site. If required, matters relating to the construction detail or engineering performance of any protective measures specified should be referred to a qualified architect or structural engineer, for further information and specification which may be necessary for their practical implementation in a manner that satisfactorily ensures their protective intention or function.
- 1.3 The AMS should be read in conjunction with, and is to be considered an essential part of, the tree protection plan ('TPP') which is attached to it at **Appendix 2.**

2. Pre-start requirements, liaison & communication

- 2.1 Before any works of any description take place on the site, the applicant, landowner or promoter of the proposed development ('the developer') shall appoint a suitably qualified arboricultural consultant to act as the supervising arboriculturist for the project, in order to ensure that the specified tree protection measures are carried out during the entire construction process. Confirmation of this appointment, and details of the supervising arboriculturist appointed, shall be provided to the Local Planning Authority ('LPA') before any works commence.
- 2.2 Before any works commence on site, the developer shall convene a pre-start meeting. This should be attended by the project manager, the site manager, the groundwork contractor, and the supervising arboriculturist. The meeting will be led by the supervising arboriculturist, who will ensure that the sequence and methods of tree protection specified in this statement are fully explained and understood by all parties. Reporting procedures, arboricultural supervision requirements, and frequency of monitoring visits (as detailed in **Section 9** and *Table 1* of this AMS) will be discussed and agreed, and relevant contact details exchanged. Any modifications to this statement arising from this meeting will be recorded and the revisions circulated to all parties.
- 2.3 The developer shall inform the supervising arboriculturist if at any time during the construction process, the site manager is replaced. In this event, the supervising arboriculturist will, within 5 days, arrange a meeting with the new site manager to review all remaining or outstanding aspects of this method statement.

2.4 A copy of this method statement, together with the TPP, shall be given to all personnel who have control over works of any nature within the root protection areas (RPAs) of the trees which are to be retained. The developer will ensure that adequate instruction is given for the implementation of the protection measures outlined within this statement.

3. Tree pruning

3.1 Minor pruning/ cutbacks are proposed to the boundary groups nos. G3 and G4. These are lapsed hedgerows which are now small trees. The pruning back is stipulated to encourage denser regrowth for screening purposes and to allow adjacent planting to establish.

4. Protective fencing

- 4.1 No vehicles of any kind shall enter the site, nor any works commence, until the root protection areas of the retained trees, as shown on the TPP, have been protected by the erection of protective fencing to the specification found in BS 5837, Section 6.2. The location of the fencing is denoted by the continuous bold purple lines on the TPP.
- 4.2 The protective fencing shall be at least 2.1m in height and comprise standard 'Heras' welded mesh fence panels mounted on rubber or concrete feet. The panels shall be fixed to each other with at least two anti-tamper clamps, installed so that they can only be removed from inside the fence.
- 4.3 The fencing shall be supported on the side closest to the retained trees by stabiliser struts braced to the ground at an angle of 45 degrees, and attached to a base plate secured to the ground with ground pins. Where the fencing is to be erected on retained hard surfacing or it is otherwise unfeasible to use ground pins, e.g. due to the presence of underground services, the stabiliser struts should be mounted on a block tray. Notices stating *"Tree Protection Zone Keep Out"* will be attached with cable ties to every other panel.
- 4.4 No activity of any kind shall be undertaken behind the protective fencing; there shall be no topsoil stripping, no storage of materials, no access for vehicles or personnel, and no excavation or changes in soil level of any kind.
- 4.5 Areas for storing or mixing of fuels, oils or cement shall be agreed at the pre-start meeting. None of these areas shall be within the area behind the protective fencing, and where possible shall not be within 10m of any retained tree.
- 4.6 No fixtures of any nature shall be attached to the retained trees, and no fires shall be lit in any position where heat could affect their foliage or branches.
- 4.7 When the installation of the protective fencing is complete, the supervising arboriculturist shall be informed so that they may come and inspect it. If it complies with this statement, the supervising arboriculturist will record the fact and notify the client and LPA.

- 4.8 The contractor's site huts may, where appropriate, be incorporated into the protective fencing line. If this is to be the case, then their locations must be agreed in advance with the supervising arboriculturist and a method statement supplied that details how the huts are to be placed and supported without compacting the soil within the RPA of any retained tree. Details of the proposed hut locations will be supplied to the LPA in advance of their positioning on site.
- 4.9 Where tall plant or equipment may be passing or working close to the canopies of the retained trees, timber uprights shall be erected and fastened to the protective fencing to prevent accidental damage to branches. Cross members between the uprights shall be marked clearly with reflective tape to ensure high visibility.
- 4.10 If the protective fencing is accidentally damaged or knocked over, the damaged sections shall be immediately marked with high visibility tape or with mesh fencing. The damaged sections shall be replaced or repaired to the original specification within 48 hours. All events of this nature must be recorded and reported to the supervising arboriculturist.
- 4.11 Other than as provided for below, the protective fencing will not be moved, dismantled or relocated without the prior approval of the supervising arboriculturist. When the construction period is complete the fencing may then be removed, but only after first informing the supervising arboriculturist of this intention.
- 4.12 For the demolition phase of the development including the removal of areas of existing hard surfacing, the protective fencing shall be initially erected in the locations denoted by the bold purple lines in the upper panel of the TPP. Following demolition and removal of the existing hard surfaced areas, the fencing will be relocated to the positions shown in the lower panel of the TPP, for the duration of the construction period of the development.

5. Ground protection

- 5.1 Where the setting back of the protective fencing in order to provide demolition and construction working space results in unmade ground within the RPAs of retained trees being exposed to demolition and construction damage, temporary ground protection shall be put in place for the duration of the demolition period, in the location denoted by magenta hatching on the TPP. In order to protect the structure of the soil adjacent to the areas of construction, the ground protection should be capable of supporting any traffic, pedestrian or mechanical, entering or using the relevant areas without being distorted or causing compaction of underlying soil.
- 5.2 The ground protection shall comprise proprietary inter-linked ground protection boards or 15mm (3/4") steel sheets placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane.
- 5.3 The ground protection shall be installed in the specified locations at the same time as the erection of the protective fencing, prior to any works commencing on the site. When its

installation is complete, the supervising arboriculturist shall be informed so that they may come and inspect it. If it complies with this statement the supervising arboriculturist will record the fact and notify the client and LPA.

- 5.4 If, during the course of demolition operations, it becomes known that the specification of the installed ground protection in any location will be insufficient to accommodate the loadings to which it will unavoidably be subjected, it shall be replaced or upgraded to a more robust specification immediately, in accordance with BS 5837 recommendations and with the advice of the supervising arboriculturist, before any further works in the relevant area proceed.
- 5.5 The ground protection shall be retained in place for the duration of the demolition operations, and shall not be removed until all works are completed, and all equipment and materials have been removed from the site.

6. Demolition

- 6.1 Where indicated on the plan, demolition of the existing structure and removal of existing hard surfacing within RPAs of retained trees shall be undertaken under direct on-site arboricultural supervision. Where possible, the existing hard surfaces within retained trees' RPAs shall be left in situ during the demolition, to provide continuing protection to underlying roots and soil.
- 6.2 Machinery and vehicles used for the demolition of structures shall be stationed and operated either outside the RPAs, or on existing floorslabs or hard surfacing, reinforced as necessary with additional temporary ground protection to support the working loads without distortion or compaction of underlying soil.
- 6.3 Structures shall be demolished so that materials are pulled away from retained trees' RPAs and are stockpiled and loaded away without vehicles encroaching into or traversing them. If existing foundations cannot be left in situ, they shall be broken up using pneumatic or hydraulic breakers, and removed using an excavator fitted with a toothless grading bucket, situated outside the RPAs or on existing floorslabs or hard surfacing, and pulling the material back away from the RPAs before lifting it out of the ground.
- 6.4 Where existing hard surfacing is to be removed within RPAs, the wearing course will be broken up using a hand-held pneumatic breaker, and removed using hand tools and wheelbarrows. Where it is necessary to remove the sub-base this shall be undertaken using digging forks to loosen the material, which will then be removed using hand tools and wheelbarrows. At the discretion of the supervising arboriculturist, it may be possible to use an excavator using a hydraulic breaker and a toothless grading bucket. If an excavator is to be used it must be situated outside the RPAs, either on top of the hard surfacing and working away from the RPAs, or from temporary ground protection.

- 6.5 Any tree roots exposed by the removal of hard surfaces or foundations of structures shall be immediately protected and kept damp by covering with wet hessian. A covering layer of topsoil will be applied as soon as is practicably possible.
- 6.6 Where areas exposed by the removal of hard surfacing are to be reinstated to soft landscaping, the underlying areas shall be lightly decompacted by hand forking over to a maximum of 100mm depth, followed by addition of clean topsoil to BS 3882: 2015, *Specification for topsoil*, to match surrounding levels. If the areas will be exposed to construction traffic movements or activity during the course of remaining construction operations, they shall either be fenced off with protective fencing, or protected by temporary ground protection, in accordance with the specifications given in the relevant sections above.

7. Underground services

- 7.1 Detailed drawings of proposed underground services have not been produced at this stage of the planning process, thus any potential impacts between trees shown retained on the TPP and proposed services have not been identified.
- 7.2 At the detailed design stage and subject to planning consent, proposed underground services will be either located outside the RPAs of trees shown retained or will utilise existing service routes.
- 7.3 It is not anticipated that any existing services within RPAs will require upgrading. In the event that this proves necessary, however, care shall be taken to minimise disturbance and where practicable, trenchless techniques employed; only as a last resort shall open excavations be considered. Where existing services within RPAs are deemed not satisfactory for any further use they should be left in situ rather than being excavated/removed.
- 7.4 In the event that incursions into RPAs are unavoidable, any new installation will comply with the methods and guidelines detailed in in the National Joint Utilities Group (NJUG), Volume 4, *Guidelines for the Planning, Installation and Maintenance of Utility Apparatus in Proximity to Trees*, Issue 2, 2007, and in accordance with the specification below.
- 7.5 Where the provision of underground apparatus within RPAs is unavoidable, trenchless insertion methods shall be used, comprising either microtunnelling, surface-launched directional drilling, pipe ramming or impact moling, as appropriate for the application required and for the distances necessary, as set out at para. 7.7.2 and Table 3 of BS 5837. In all cases, entry and retrieval pits shall be sited outside the RPAs, and excavations for these carried out by machinery stationed and working from outside the RPAs, or on suitable temporary ground protection.
- 7.6 If open excavations for service or drainage trenches within RPAs are unavoidable, these shall be undertaken under direct on-site arboricultural supervision. The first 750mm depth

of the excavation (or the required depth if this is less than 750mm) shall be excavated using hand tools only, assisted with an airspade (a compressor-powered compressed air lance), if so required by the Local Planning Authority and/or supervising arboriculturist.

- 7.7 Any roots found with a diameter of less than 25mm shall be cleanly severed by the supervising arboriculturist. If any roots of 25mm diameter and above are found, they shall initially be covered and protected by damp hessian. The supervising arboriculturist shall then decide if it is necessary to retain them. If not, they shall be cleanly severed. If removal of such roots is not feasible, then they shall be wrapped with a 50:50 mixture of topsoil and clean sharp sand with a minimum thickness of 50mm, encased in polythene and retained spanning the trench.
- 7.8 Ducting, cables or pipes for the utilities shall then be threaded into the trench beneath the spanning roots. Backfilling of the trench shall be undertaken in 150mm layers, with clean topsoil only being used within the uppermost 400mm, each layer of backfill being compacted by foot pressure only. Excavator buckets or other mechanical plant will not be used to compact the backfill.

8. Landscaping

- 8.1 On completion of construction works, but prior to the commencement of any landscaping works within the protected area behind the protective fencing the developer shall arrange a meeting with the site manager, the supervising arboriculturist and the landscape contractor. The details of this part of the method statement shall be discussed in relation to the proposed landscape operations and a clear sequence of operations established.
- 8.2 Within the RPAs the following principles will be maintained:
 - Existing ground levels shall not be substantially altered.
 - No plant or vehicles shall enter the RPA.
 - No fuels or chemicals shall be stored within any of these areas.
 - Any excavation required for fence posts, log retaining walls or any other landscape structures shall be undertaken by hand, under direct arboricultural supervision. If roots are encountered, then the position of the excavation shall be moved to a new location. If this is not possible then any roots with a diameter less than 25mm may be cut cleanly by hand. Any exposed roots shall be re-covered within 24hrs of excavation.
 - No structure shall be fastened in any way to the trunks of the retained trees.
 - No drainage or irrigation pipes shall be installed within the RPAs of the retained trees.
 - Any unwanted vegetation shall be removed by hand.

9. Supervision & monitoring

- 9.1 At the start of the construction process the supervising arboriculturist shall visit the site on the occasions specified to inspect the tree protection measures (fencing and ground protection) as installed. If these measures comply with the specifications detailed in this method statement, statements of compliance shall be sent to the developer and copied to the LPA.
- 9.2 The supervising arboriculturist shall then visit the site on a regular basis, as agreed at the pre-start meeting, or when specifically required as set out in *Table 1* below, to ensure that the tree protection measures are kept in place and functioning as designed. Regular contact will be maintained with the site manager to determine any forthcoming operations that may make an impact on these tree protection measures and if arboricultural supervision is required. A record of all monitoring visits will be kept, and copies sent to the developer and the LPA upon request.
- 9.3 The site manager shall give at least 48 hours' notice to the supervising arboriculturist of any operations, which may make an impact on the RPAs of the retained trees.
- 9.4 Any alterations or variations in drawings for the site that are in, or within, the RPAs of the retained trees shall be referred in the first instance to the supervising arboriculturist for advice. If these changes make any kind of impact on the retained trees the supervising arboriculturist shall suggest changes that will either avoid damage to the retained trees or offer solutions to minimize the impact. If required, the supervising arboriculturist will liaise with the LPA's tree officer to agree a way forward, since any alterations to the approved details may require the LPA's prior written agreement. Following these consultations, the supervising arboriculturist shall issue revisions to the TPP and this AMS that reflect the changes.
- 9.5 Where any operations carried out by the developer deviate substantially from this AMS, work must cease immediately. A meeting will be convened between the developer, the supervising arboriculturist, the LPA tree officer and the site manager to determine the best method to mitigate any damage that may have occurred.

Visit no.	Trees affected/ relevant	Timing of visit	Function carried out
1	All	Prior to the start of any demolition works.	To lead the pre-start meeting and check protective fencing and ground protection have been installed in the correct locations and to the correct specification.
2	Trees 18 & 19	During the demolition and removal of the existing concrete base for the barn.	To supervise the removal of the concrete base within the RPAs of tree nos. 18 & 19.
3	All	Frequency of monitoring visits to be determined during the pre-start meeting.	To check the protective fencing & ground protection remain in place and that activities which would be harmful to trees are not being carried out.
4	All	At any other time which is sensitive in arboricultural terms.	To ensure retained trees are protected from development activities.

Table 1 - Timings of supervision and monitoring visits

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November 2023



APPENDIX 1 – Tree Schedule

Notes for the Tree Schedule

This schedule is based on a tree survey carried out in accordance with the recommendations of British Standard, BS 5837 (2012) "Trees in relation to design, demolition and construction - Recommendations" ('BS 5837') by Michael Roberts on Wednesday the 13th of September 2023. Weather conditions at the time were dry with scattered cloud. Deciduous trees were fully in leaf.

The information contained in this schedule reflects the condition of the trees at the time of the survey, based on visual inspection from the ground only; they were not climbed, and no internal investigations were undertaken. A BS 5837 survey for planning or development purposes is not a detailed tree hazard or risk survey. As such, no guarantee is given as to the structural integrity or safety of any trees included.

As trees are dynamic organisms and subject to continual growth and change, no dimensions expressed in this schedule may be relied upon for development planning purposes for more than 24 months from the date of survey. Estimated dimensions are marked 'est'.

- 1. No.: Expressed in sequential order starting from number 1 woodlands, groups & hedges are prefixed as W, G, & H respectively.
- 2. Species: The common name as given in "Collins Tree Guide", Johnson & More (2004).
- 3. Height: Estimated with the aid of a 'Disto' laser rangefinder and expressed in metres, to the nearest metre.
- 4. Trunk Diameter: Measured at 1.5m above ground level and expressed in millimetres to the nearest 10mm; where multiple stems are present they are measured individually, and an aggregated equivalent single trunk diameter is calculated in accordance with BS 5837, in order to derive the tree's root protection area ('RPA').
- 5. Radial Crown Spread: Distance in metres from the centre of the trunk to the outermost edge of the crown at each cardinal point of the compass, rounded up to the nearest half metre; or in the case of uniform or symmetrical crowns, the average distance from the centre of the trunk to the outermost edge of the crown.
- 6. Crown Clearance: Mean height, in metres, from adjacent ground level to the lowest point of the live crown.
- 7. Height to First Branch: Height, in metres, of the first significant branch (>100mm diameter), or to crown break from ground level.
- 8. Life Stage: Young, Semi-mature, Mature, Over-mature, Veteran/Ancient.
- 9. Physiology: The tree's health and vigour in comparison to a typical specimen of the same species and age: Good, Average, Below average, Poor, Dead.
- **10.** Structure: The tree's structural condition based on assessment of any visible roots, and of its trunk, main branches and crown, noting the presence of any obvious defects or decay: Good, Average, Below average, Poor, Hazardous.
- 11. Landscape Value: An assessment of the tree's visual importance in the local landscape in its present context: High, Moderate, Low, Nil.
- 12. Estimated Years: Estimate of the tree's likely remaining contribution expressed in years: <10, 10-20, 20-40, 40+.
- **13.** Comments: Notes relating to the tree's health and condition, structure and form, estimated life expectancy and importance within the local landscape; including notes of any restrictions to access for inspection, presence of potential habitat features (natural or artificial), or other significant observations.
- 14. Category: A rating given to trees based on Table 1 in BS 5837, summarised below:

Category 'U' - Trees in such a condition that any existing value would be lost within 10 years and which should, in the current context, be removed for reasons of sound arboricultural management.

Category 'A' - Trees of high quality and value; in such a condition as to be able to make a substantial contribution (normally a minimum of 40 years).

Category 'B' - Trees of moderate quality and value; those in such a condition as to make a significant contribution (normally a minimum of 20 years).

Category 'C' - Trees of low quality and value; currently in adequate condition to remain until new planting could be established (normally a minimum of 10 years), or young trees with a stem diameter below 150mm.

Sub-categories (where appropriate); 1 – Mainly arboricultural qualities: 2 – Mainly landscape qualities: 3 – Mainly cultural values, including conservation.

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clear- ance	Height to 1st Branch	Life Stage	Physi- ology	Structure	Landscape Value	Est. Years	Comments	Cate- gory
1	Pear	8.5m	265mm 150mm 140mm 180mm	NE2m SE3m SW4.5m NW2.5m	2m	0.75m	Mature	Average	Average	Low	10-20	Multi-stemmed from base; drawn up specimen; no significant structural defects found at time of survey; of limited potential; restricted rooting from surrounding stone wall.	C (12)
2	Walnut	15m	380mm	N6.5m E3m S4m SW7m W7m	N3m E1.5m S1m SW0m NW0m	1m W	Semi- mature	Good	Average	Moderate	20-40	Trunk 'S' bends upwards, due to suppression from adjacent overtopping specimens; low canopy; asymmetrical crown as suppressed by adjacent specimens; no significant structural defects found at time of survey.	B (12)
3	Silver Birch	13m	275mm	N3.5m E2m S2m SW4m W3.5m	3m	2m N	Semi- mature	Average	Below average	Low	10-20	Suppressed crown as overtopped by adjacent specimens; recent branch removal to the south, to liberate powerline 3m SW of trunk; of limited potential.	C (1)
4	Silver Birch	20m	460mm	N7m E3m S6m W5m	N2m	2m NW	Mature	Good	Average	Moderate	20-40	Girdling root NE of base of trunk; slightly leaning trunk; asymmetrical crown as suppressed by adjacent specimens; no significant structural defects found at time of survey.	B (12)
5	Scots Pine	16m	500mm ivy	N0.5m E3m SE4m S6m SW6m W4m	S2m	1.5m	Semi- mature	Average	Below average	Moderate	20-40	Ivy-covered; trunk immediately adjacent to retaining wall; restricted rooting; three stemmed; one-sided crown as previously cut back from powerline.	B (2)
6	Silver Birch	18.5m	260mm	N3m E3m S4.5m W2m	5.5m	5.5m	Semi- mature	Average	Below average	Low	20-40	Slightly leaning trunk; drawn up specimen; at risk of failure if companion shelter removed; no significant structural defects found at time of survey.	C (12)
7	Silver Birch	12m	155mm	N4m E2.5m S1m W2m	N2m	2.5m N	Young	Average	Below average	Low	10-20	Young pioneer tree extending canopy into site; one-sided crown as suppressed by adjacent specimens; of limited potential.	C (12)
8	Silver Birch	15m	210mm	N4.5m E3m S1m W2.5m	N2m	2m	Semi- mature	Average	Average	Moderate	20-40	Slightly leaning trunk; ivy-covered; drawn up specimen; asymmetrical crown as suppressed by adjacent specimens; no significant structural defects found at time of survey.	B (12)

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clear- ance	Height to 1st Branch	Life Stage	Physi- ology	Structure	Landscape Value	Est. Years	Comments	Cate- gory
9	Silver Birch	17m	180mm	N3m E2m S2m W1m	10m	10m	Semi- mature	Below average	Below average	Low	10-20	Drawn up specimen; high crown; at risk of failure if companion shelter removed; of limited potential.	C (12)
10	Scots Pine	11m	260mm	N0m E1m S4m W1.5m	5m	5m S	Semi- mature	Below average	Below average	Low	10-20	Slightly leaning trunk; ivy-covered; trunk 'S' bends upwards, due to suppression from adjacent overtopping specimens; evidence of crown pruning back from powerline.	C (12)
11	Scots Pine	12.5m	215mm ivy	N0m E1m S6m W2m	S3m	2m S	Semi- mature	Below average	Below average	Low	10-20	Slightly leaning trunk; ivy-covered; one-sided crown as previously cut back from powerline; of limited potential.	C (12)
12	Scots Pine	18m	360mm	N0m E3m S7m W4m	\$5.5m	6m S	Semi- mature	Average	Below average	Moderate	20-40	Ivy on trunk; trunk 'S' bends upwards, due to suppression from previously adjacent overtopping specimens; telephone wire under tension of 'S' bend in trunk; no significant structural defects found at time of survey.	B (2)
13	Scots Pine	16m	225mm	N0m E1.5m S4.5m W2m	7.5m	7.5m S	Semi- mature	Below average	Below average	Low	10-20	Single vertical trunk; high crown; drawn-up and mutually suppressed; at risk of failure if companion shelter removed.	C (12)
14	Scots Pine	19.5m	235mm	N2m E0.5m S0.5m W1m	10m	10m	Semi- mature	Average	Below average	Low	20-40	Single vertical trunk; high crown; narrow crown; drawn up specimen; at risk of failure if companion shelter removed.	C (12)
15	Holm Oak	11m	170mm	N4.5m E2m S2m W2m	1m	2m	Young	Average	Below average	Low	40+	Suppressed specimen; suppressed crown as overtopped by adjacent specimens; of only low-level screening value.	C (12)
16- 17	Scots Pine	8m	150mm ivy est	Om	0m	0m	Dead	Dead	Hazardous	Low	Dead	Dead trees.	U
18	Silver Birch	19.5m	410mm ivy	N8m E6.5m S6m SW4m NW7m	N5m	5.5m N	Mature	Poor	Average	Moderate	10-20	Ivy on trunk; above average dead wood in crown; very sparsely foliated; of limited potential.	C (12)

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clear- ance	Height to 1st Branch	Life Stage	Physi- ology	Structure	Landscape Value	Est. Years	Comments	Cate- gory
19	Field Maple	15m	290mm 190mm 260mm	N6m E7m S3m W4m NW7m	0.5m	3m NW	Mature	Good	Average	Moderate	20-40	Three stemmed from base; crown overhangs adjacent building; ivy on trunks; no significant structural defects found at time of survey.	B (12)
20	Holly	7m	200mm est	Om	0m	0m	Dead	Dead	Hazardous	Nil	Dead	Dead tree; should be removed for sound arboricultural management reasons.	U
21	Scots Pine	11m	175mm est	Om	0m	0m	Dead	Dead	Hazardous	Nil	Dead	Dead tree; should be removed for sound arboricultural management reasons.	U
22	Scots Pine	16m	280mm	NE3m SE5m SW2m NW3m	SE4m	5.5m SW	Semi- mature	Below average	Below average	Moderate	10-20	Previously twin stemmed; sub-dominant stem has failed at included union; 0.5m from ground level on S side of trunk; of limited potential.	C (12)
23	Scots Pine	8m	275mm est	Om	0m	0m	Dead	Dead	Hazardous	Nil	Dead	Dead tree; failed a 8m; now standing deadwood.	U
24	Walnut	11m	335mm	N4.5m E6m S7m W5m	0.3m	1.6m S	Semi- mature	Good	Average	Moderate	40+	Good example of species; would make a good feature tree; no significant structural defects found at time of survey; recommend a sympathetic crown lift; removing only tertiary branches and pruning primary and secondary to a max diameter cut of 100mm.	B (12)
25	Silver Birch	15m	235mm	N2m E6m S4m W3m	E3m	2m E	Semi- mature	Poor	Below average	Moderate	10-20	Earlier than normal leaf browning and fall; asymmetrical crown as suppressed by adjacent specimens; of short term potential only.	C (12)
26- 28	Silver Birch	#T26 19m #T27 15m #T28 19m	#T26 360mm #T27 280mm #T28 440mm	7m	3.5m	2.5m	Mature	Average	Average	Moderate	20-40	Good examples of species; slightly leaning trunks; drawn up specimen; no significant structural defects found at time of survey.	B (12)
G1	Hazel, Dogwood and Goat Willow	Min 3m Max 5m	Max 100mm	2m	0.2m	0.2m	Young	Average	Below average	Low	20-40	Of only low-level screening value; restricted rooting from surrounding stone wall; screens adjacent footpath and driveway to Ponds House.	C (12)

No.	Species	Height	Trunk Dia.	Radial Crown Spread	Crown Clear- ance	Height to 1st Branch	Life Stage	Physi- ology	Structure	Landscape Value	Est. Years	Comments	Cate- gory
G2	Scots Pine	Min 16m Max 20m	Min 215mm Max 510mm ivy	N5.5m E2.5m S2.5m W2.5m	N3m	4.5m N	Semi- mature	Average	Average	Moderate	20-40	Ivy on trunks; group of drawn-up, mutually suppressed specimens; no significant structural defects found at time of survey; asymmetrical crowns as suppressed by adjacent specimens.	B (12)
G3	Dogwood and Field Maple	12m	Min 75mm Max 245mm	N3m E4m S3m W7m	0.5m	1m	Semi- mature	Average	Average	Moderate	20-40	Belt of closely planted specimens, designed to form a screen at elevated point to screen footpath east from site; drawn up specimens.	B (2)
G4	Field Maple, English Oak, Blackthorn, Dogwood, Leyland Cypress, Ash and Silver Birch	Min 8m Max 12m	Min 75mm est Max 300mm est	N4m E3m S5.5m W3m	0.5m	1m	Semi- mature	Average	Average	Moderate	20-40	Row of closely planted specimens, designed to form a hedge or screen; recommend pruning lateral branches back to edge of existing sand manage.	B (12)
G5	Scots Pine, Hazel, Field Maple, Common Lime, English Oak and Sweet Chestnut	Min 3m Max 19m	Min 150mm Max 450mm	N4m E6m S4m W4m	E1m	3m	Semi- mature	Average	Average	High	40+	Area of established planting forming a copse between site and adjacent stable yard; provides screening and acoustic buffering; poor specimens have been individually surveyed.	B (2)
G6	Hazel, Dogwood, Elder and Field Maple	Min 6m Max 12m	Min 75mm Max 250mm	4m	0.5m	0.5m	Semi- mature	Average	Average	Moderate	20-40	Row of closely planted specimens, designed to form a hedge or screen.	B (12)



DAVID ARCHER ASSOCIATES

APPENDIX 2 – Tree Protection Plan



PROTECTIVE FENCING

To comprise of 2m tall welded mesh panels on rubber or concrete feet. Panels are to be joined together using a minimum of two anti-tamper couplers, installed so that they can only be removed from inside the fence. The panels should be supported on the inner side by stabiliser struts, which should be attached to a base plate and secured with ground pins.



GROUND PROTECTION

To be installed prior to any demolition or construction works. Proprietary inter-linked ground protection boards placed on top of a compression-resistant layer (e.g. 150mm depth of woodchip), laid onto a geotextile membrane.

SUPERVISED DEMOLITION / SURFACE REMOVAL

Where indicated on the plan, demolition of the existing structure and removal of existing hard surfacing within RPAs of retained trees shall be undertaken under direct on-site arboricultural supervision. Where possible, existing hard surfaces within retained trees' RPAs shall be left in situ during the demolition, to provide continuing protection to underlying roots and soil. Machinery used for the demolition of structures shall be stationed and operated either outside the RPAs, or on existing floorslabs or hard surfacing, reinforced as necessary with additional temporary ground protection to support the working loads without distortion or compaction of underlying soil.

The structure shall be demolished so that materials are pulled away from retained trees' RPAs and are stockpiled and loaded away without vehicles encroaching into or traversing them. If existing foundations cannot be left in situ, they shall be broken up using pneumatic or hydraulic breakers, and removed using an excavator fitted with a toothless grading bucket, situated outside the RPAs or on existing floorslabs or hard surfacing, and pulling the material back away from the RPAs before lifting it out of the ground.

Where existing hard surfacing is to be removed within RPAs, the wearing course will be broken up using a hand-held pneumatic breaker, and removed using hand tools and wheelbarrows. Where it is necessary to remove the sub-base this shall be undertaken using digging forks to loosen the material, which will then be removed using hand tools and wheelbarrows. At the discretion of the supervising arboriculturist, it may be possible to use an excavator using a hydraulic breaker and a toothless grading bucket. If an excavator is to be used it must be situated outside the RPAs, either on top of the hard surfacing and working away from the RPAs, or from temporary ground protection.

Any tree roots exposed by the removal of hard surfaces or foundations of structures shall be immediately protected and kept damp by covering with wet hessian. A covering layer of topsoil will be applied as soon as is practicably possible.

VIEWPORT 1

DEMOLITION SITE PLAN INDICATING TREE PROTECTION MEASURES

