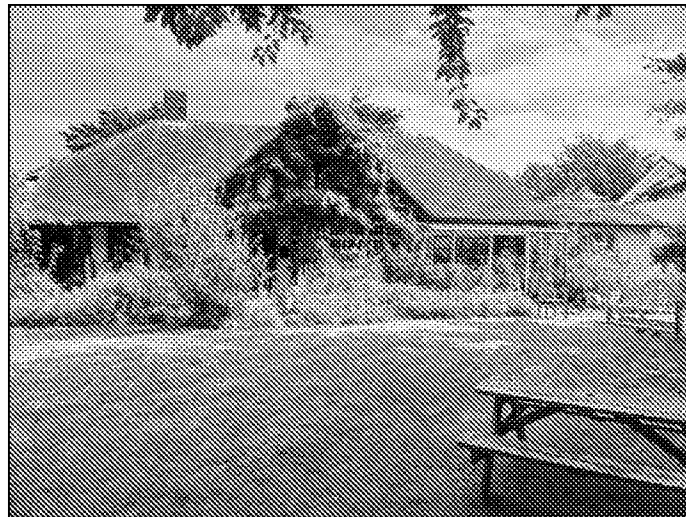


Arboricultural Appraisal Report

Impact Assessment & Method Statement to Inform Development

BS5837:2012 Trees in relation to Design, demolition and construction – Recommendations

Rest Harrow
Middle Way
East Preston
BN16 1SB



CLIENT:

ABL3 Architects Ltd

MWA REF:

DEV240711-1194

MWA CONSULTANT:

Mark Bisley BSc Hons

REPORT DATE:

08/08/2024

MWA Arboriculture Ltd
Bloxham Mill Business Centre
Barford Rd, Bloxham
Banbury
OX15 4FF

MWA Arboriculture Ltd
Unit 8 Stephenson House
Horsley Business Centre
Horsley
Newcastle Upon Tyne
NE15 0NY

Technical Summary

Proposal summary: demolition of an existing house and its replacement with another on a slightly enlarged footprint, construction of a garage and associated landscaping.

See supervision statement regarding direct supervision of works and monitoring.

Table 1: Summary of Tree works Summary

Vegetation Works Summary	Vegetation Affected by Category			
	Cat A	Cat B	Cat C	Cat U
Removal under sound arboricultural management	0	0	0	0
Removal due to development	0	1	7 +1 pt.	0
Pruning (Enabling Works)	0	0	0	0

Table 2: Mitigation Requirements Summary

Mitigation Requirements Summary	Vegetation Affected by Category			
	Cat A	Cat B	Cat C	Cat U
Protective Fencing	0	1	4	0
Ground Protection	0	0	0	0
Excavation within RPAs	0	0	0	0
No Dig Installation	0	0	0	0

Table 3: List of Vegetation Works and Mitigation

Works / Mitigation	Vegetation Affected
Removal	T1, T2, T3, T4, T5, TG1, SG1, SG3, H1 partial
Pruning	None
Protective Fencing	T6, T8, T10, T11, TG2, H1
Ground Protection	None
Excavation within RPAs	None
No Dig Installation	None

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Introduction

1 Scope

- 1.1 The scope of this report is limited to an appraisal of the existing significant vegetation on (and/or adjoining) the site and identification of the implications of development on retained vegetation in accordance with our instruction. The assessment is to be made with reference to BS 5837:2012 'Trees in Relation to design, demolition and construction – Recommendations'. This report is based on conditions found at the time of our survey.
- 1.2 To prepare clear recommendations supported by relevant plans and data in order to facilitate consideration of the arboricultural implications by the Local Planning Authority (LPA).
- 1.3 To consider the development proposals, identify areas where there are arboricultural issues and to recommend possible solutions.
- 1.4 To consider additional information supplied, to identify arboricultural issues arising from this information and to recommend possible solutions.
- 1.5 No responsibility is assumed by MWA Arboriculture Ltd for legal matters that may arise from this report, and the consultant shall not be required to give testimony or to attend court unless additional contractual arrangements are made.
- 1.6 This report is not a Tree Risk Management Report or a Hazard Analysis Report and its use as such is invalid.
- 1.7 The vegetation has been assessed from ground level only. Assessment of condition is based on a visual tree assessment (VTA). No detailed inspection of the upper crown has been carried out. No decay detection equipment (destructive or non-destructive) has been used to further assess the condition of the vegetation, which is beyond the scope of the survey. Any dangerous trees requiring further assessment on safety grounds will be identified.
- 1.8 Due to the changing nature of trees and other site circumstances this report and any recommendations made are limited to a 3-year period. Any alteration to the application site or any development proposals could change the current circumstances and may invalidate this report and any recommendations made. Should this be the case this report will require revision to reflect the development proposals.
- 1.9 A lack of recommended work does not imply that a tree is safe and likewise it should not be implied that a tree will be made safe following the completion of any recommended work.
- 1.10 All measuring instruments were used in accordance with appropriate user guides.
- 1.11 No site investigations to identify underlying soils and geology have been undertaken. This information may have a bearing upon existing and proposed foundations and landscape design. The project engineer is to be consulted regarding impacts from the recommendations contained within this report.

-
- 1.12 Any legal description or information given to MWA Arboriculture Ltd is believed to be accurate.
- 1.13 Where solutions to arboricultural problems are specified which require the usage of a third-party product e.g., no dig roadway construction, no liability is assumed for the performance or suitability of the product and specialist advice as to the suitability or installation of the product should be sought from the manufacturer or other specialist.
- 1.14 No responsibility is assumed by MWA Arboriculture Ltd for legal matters that may arise from this report, and the consultant shall not be required to give testimony or to attend court unless additional contractual arrangements are made.
- 1.15 Any alteration or deletion from this report shall invalidate it as a whole.

2 Supporting Documents

- 2.1 We have been supplied with .dwg files showing the existing situation and the proposals. Tree locations were plotted from a topographical survey.

3 Components of Report

- 3.1 This report comprises the following elements:

Site Assessment

- Baseline tree survey of vegetation that may be impacted by proposals
- Description of the site
- Assessment of existing vegetation / tree stock
- Tree Survey Schedule (TS)

Development Appraisal

- Description of proposed development
- Arboricultural Impact Assessment

Arboricultural Method Statement

- Arboricultural Method Statement (AMS) - preliminary
- Tree Protection Plan (TPP)

Site Assessment

4 Statutory Controls, Policy and other Constraints

- 4.1 A check with Arun District Council returned that no trees on the site are subject to a Tree Preservation Order (TPO) nor within a Conservation Area (CA).
- 4.2 It would not therefore be necessary to inform the Local Planning Authority (LPA) before working on trees within or adjacent to the site.
- 4.3 National planning policy is set out in the revised National Planning Policy Framework (NPPF) July 2023 and trees on this site should be considered against the information contained in Section 15 "Conserving and enhancing the natural environment". Trees can also contribute to historical character and settings and where this is the case Section 16 "Conserving and enhancing the historic environment" would also be relevant.

5 Tree Survey

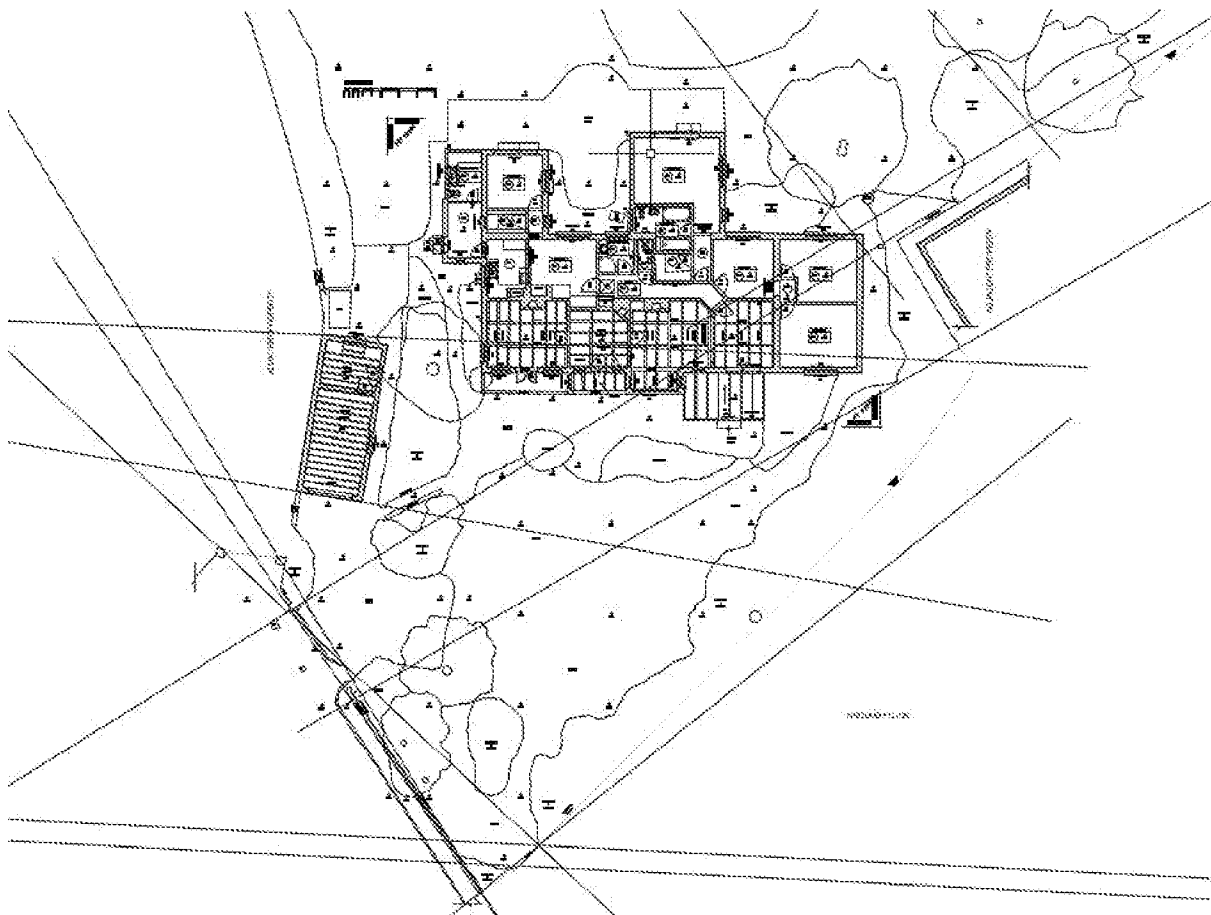
- 5.1 The survey was conducted on 31/07/2024. The weather was dry with scattered cloud. A total of 15 individual trees, seven collections and a hedge were recorded during the survey.
- 5.2 This type of survey is not expected to include all vegetation, but all trees with a stem diameter in excess of 75mm at 1.5m from the ground should be included. Substantial hedges and similar large collections should also be included, but areas such as planting beds with annual or herbaceous species would not be relevant to the survey. The terms 'tree' and 'vegetation' are used interchangeably in this document.
- 5.3 Vegetation was assessed in accordance with Sections 4.4 and 4.5 of BS 5837:2012. Under this system trees are allocated a retention category based upon their quality and value in the existing context. These are:
 - Category A – trees of high quality with long term future potential;
 - Category B – trees of moderate quality with medium term future potential;
 - Category C – trees of low quality with short term future potential;
 - Category U – trees in such a condition that they cannot be realistically be retained as living trees for longer than 10 years.
- 5.4 Category U trees may be upgraded if they have identifiable conservation, heritage or landscape value, but only where this does not compromise safety.
- 5.5 T9 is a mature goat willow with considerable potential and large size for the species and was therefore assigned to category A.
- 5.6 T5, T10 and T14 are all large and mature cypress which provide significant features in the garden, but are somewhat suppressed by adjacent vegetation so only gain category B.

- 5.7 All of the remaining surveyed vegetation was considered to be worthy category C.
- 5.8 Tree locations were plotted from a topographical survey.
- 5.9 The survey information is provided in tabular form in the associated document MWA TS 01 survey schedule.

6 Site Description

- 6.1 The site is a residential property in a residential area. Adjacent houses are varied in form and plot size. Land to the north and east is fields.
- 6.2 The area is approximately level.
- 6.3 The property contains a large amount of trees and other vegetation. This is mostly to the east of the site, but some planting is present on the boundaries adjacent to the house. This limits views of the site from the outside. Screening vegetation is however mostly of indifferent quality.

Figure 1: Existing Situation

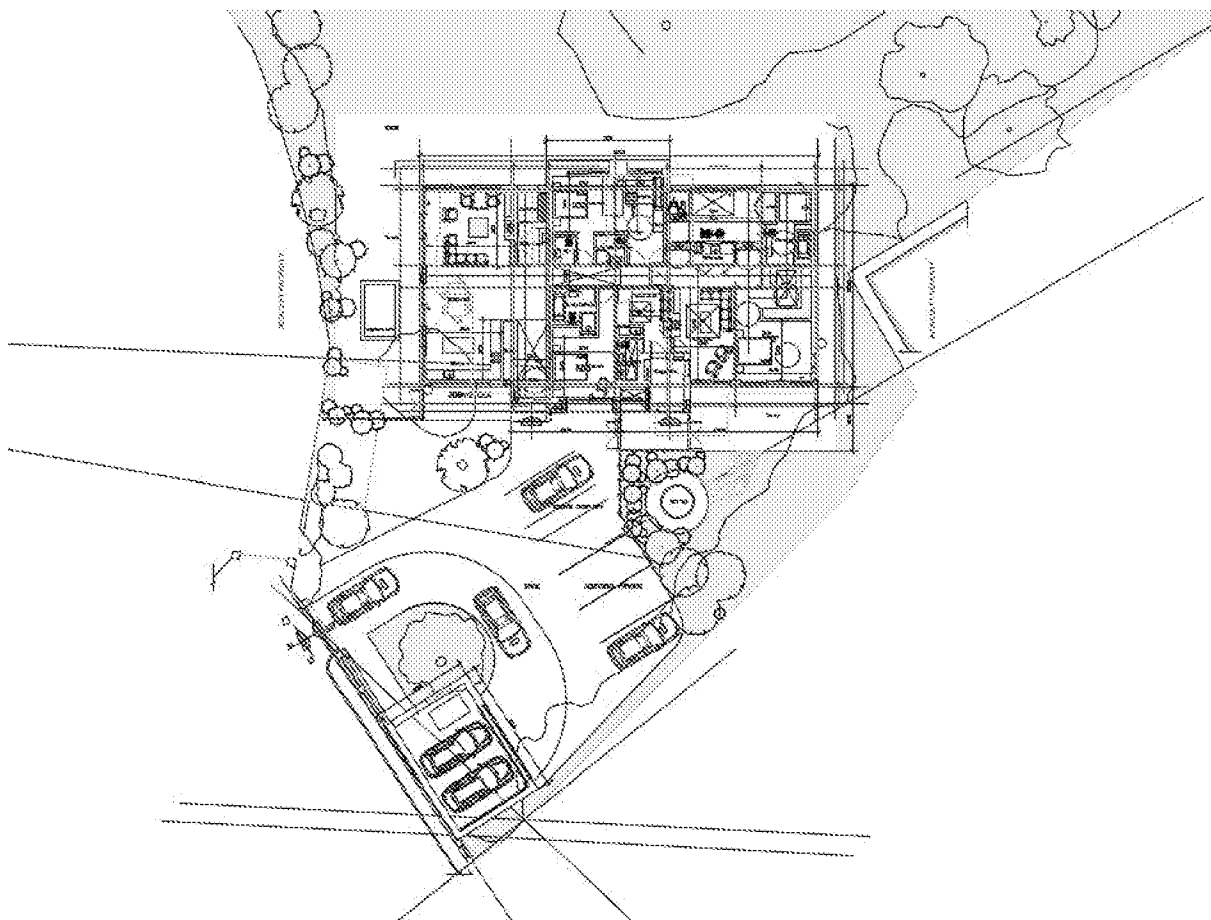


Development Appraisal

7 Development Proposal

- 7.1 The proposed development will entail the demolition of the existing house and its replacement with a single structure on an enlarged footprint, a detached garage and associated hard and soft landscaping.

Figure 2: Proposed Situation



8 Arboricultural Impact Assessment

- 8.1 This appraisal is made in the context of a potential development. It therefore seeks to identify vegetation that would form a constraint to development, that vegetation that would need to be removed, assess impacts from the proposals and define measures to assist in the long-term retention of retained tree stock. The assessment does not consider the requirements of other disciplines such as highways or drainage.

- 8.2 Our assessment of the arboricultural component of the site is presented in the associated documents MWA Tree Survey Schedule MWA TS 01. Our assessment of the proposed scheme is shown in associated plan MWA TPP 01. The assessments consider tree location, ground conditions, likely root morphology, current dimensions, future growth and the proposed setting. The tolerance of the trees to disturbance based on species, age, condition and the presence of surrounding trees and / or built form is also considered.
- 8.3 **Tree/hedge removals:**
- 8.4 One category B tree (T5), four category C trees (T1, T2, T3, T4) and three category C collections (TG1, SG1, SG3) will be removed and category C hedge H1 will be partially removed.
- 8.5 **Known Impacts:**
- 8.6 Issues surrounding shading and the pressure for future tree works/removals are not judged to be significant as the relationship between existing trees and the replacement building will be very similar.
- 8.7 The proposed replacement of the existing house will not have a significant impact on the majority of the site as only the area around the house and the site entrance will be amended.
- 8.8 Trees at the entrance and on the southern boundary will need to be removed to facilitate the new driveway and garage. Established shrubs next to the southern boundary will mean that a dense, low-level screen will be retained.
- 8.9 H1 will be partially removed to provide room for development and a revised landscaping scheme. This is likely to result in a loss of boundary screen, but this could be addressed in the proposed landscaping.
- 8.10 T1 is shown as removed as the proposed drive will impact roots on all sides and because the garage would require removal of a significant part of the crown to the south. The planting area could however provide a location for a replacement tree as a feature at the entrance.
- 8.11 T5 would also lose a significant amount of its roots to the revised driveway such that retention is in doubt. Given the high lift and overall form of the tree removal has been considered appropriate as there is limited scope for reduction.
- 8.12 Threat from indirect damage and impacts on the rooting environment of retained trees is addressed, where practicable, by erection of protective fencing in accordance with the AMS.
- 8.13 It is important to protect the ground within the RPAs from damage and compaction the as a result of vehicular and pedestrian movements during development and this will involve the installation of temporary ground protection as indicated on the TPP.

8.14 **Potential Impacts:**

- 8.15 We currently have no information relating to the provision of services to the new buildings. In order to safeguard retained vegetation we advise that any excavation undertaken within the RPA of retained trees is supervised by a competent arboriculturist and that any root pruning which way be necessary is undertaken in accordance with NJUG10.

Arboricultural Method Statement

9 Arboricultural Method Statement (subject to revision if planning conditions are imposed)

- 9.1 Our assessment identifies that the proposed development will require works to be conducted within the RPAs of retained trees based on the current information. Extra care is therefore required to prevent damage to retained trees.
- 9.2 The following sections provide information relating to the order of implementation and proposed works. This assessment is based upon the plans available at the time of writing. As such the recommendations below may be subject to revision in response to additional information or revisions required to discharge planning conditions.

9.3 Restrictions to operations within RPAs

- 9.4 Where development activities occur within the RPAs of retained vegetation the following shall apply within the RPA:
- All excavation will be by hand and completed under direct arboricultural supervision of the project arboriculturist, following a written method statement that has first been approved by the local planning authority.
 - No mechanical excavation is to take place within the RPA. In some circumstances it may be permissible under strict arboricultural site supervision and with a site-specific method statement.
 - No lowering of levels for any purpose (except removal of grass sward using hand tools).
 - No storage of plant or materials.
 - No storage or handling of any chemical including cement washings.
 - No vehicular access unless specified when those needed for construction works such as light diggers, mini dumper mini piling machinery shall advance only over ground protection or existing hard surfaces (if present) subject to loads.
 - No substances injurious to tree health, including fuels, oil, bitumen, cement (including cement washings), builders' sand, concrete mixing and other chemicals shall be stored or used within or directly adjacent to the protection area of retained trees.
 - No fire is permitted at any time.
 - Whacker plates will not be used within the RPAs of retained trees. Non vibrating rollers will be used to compact materials if required. Hand tampers should be avoided as they can also damage roots, but these may be employed if access prevents the use of a roller.

- 9.5 Care shall be taken when planning site operations in proximity of retained trees to ensure that wide or tall loads, or plant with booms, jibs and counterweights, can operate without coming into contact with retained trees. Such contact can result in serious injury to them and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity of trees shall be conducted under the supervision of a banksman, to ensure that adequate clearance from trees is at all times maintained.
- 9.6 **Enabling works**
- 9.7 A pre-commencement meeting will be held to discuss phasing of works and appropriate practices where works are to be conducted within RPAs. This meeting will include the site agent and project arboriculturist.
- 9.8 Works to vegetation detailed in the Tree Protection Plan MWA TPP 01 will be completed before any other activity is conducted on the site.
- 9.9 Fencing will be erected and ground protection installed as shown in the Tree Protection Plan, MWA TPP 01, as far as existing structures will allow. This will conform the full specification shown below, but rubber feet may be used if site constraints prevent the use of the full bracing. All weather notices will be attached to the barriers stating that no access is permitted to the fenced area; an example is also shown below.

Figure 3: Fencing Specification

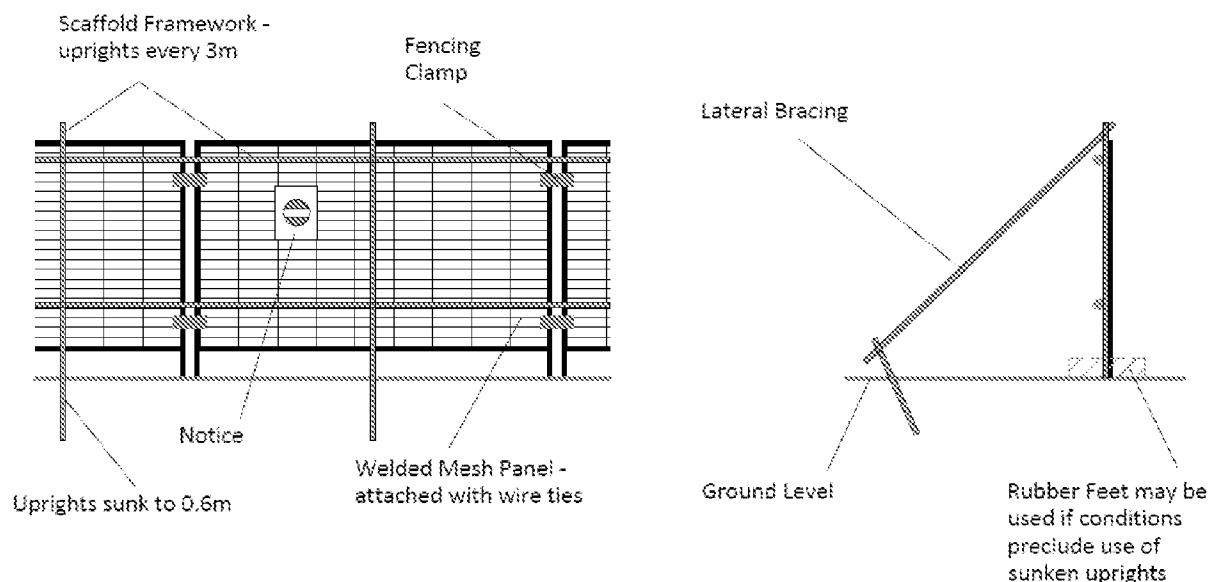


Figure 4: Fencing Warning Sign



10 Demolition Phase

- 10.1 Above ground structures will be demolished within their own footprint as far as possible. Existing hard surfaces provide the best protection to roots which extend below the surface. Where possible these will be left in place until the final stage of the demolition process.
- 10.2 Demolition of above ground structures will be ordered to minimise potential impacts on trees with particular attention given to access routes adjacent to retained vegetation. Plant may be used to conduct these works subject to the use of a banksman to safeguard tree canopies.
- 10.3 Footings, sub bases and existing services within RPAs should be left in place wherever possible. Should this not be possible they will be removed using only hand tools (if practicable). If necessary, plant may be used but methodology will need to be agreed in advance with the project arboriculturist in advance as these works may need to be supervised.
- 10.4 Existing hard surfaces within RPAs may be broken out using machines located outside the RPAs or on existing surfaces capable of supporting the loads required. All material will to be removed manually if possible. No plant is permitted within unprotected RPAs at any time, but spoil may be loaded into the buckets of machines located outside the RPA and reaching in.

- 10.5 Exposed surfaces will be protected as soon as possible once demolition material has been removed. Where exposed roots are present that cannot be immediately covered damp hessian will be used to wrap the roots (hessian will not be wetted if there is a chance of frost). Wrappings will be removed before burying the roots. If possible exposed areas will be covered with at least 100mm of topsoil or with ground boarding if specified.
- 10.6 Should the level of dust build-up on the tree become significant, the advice of an arboriculturist will be sought. If considered appropriate by the attending arboriculturist the affected trees will be hosed down immediately.
- 10.7 A pre-commencement meeting will be held to discuss phasing of works and appropriate practices where works are to be conducted within RPAs. This meeting will include the site agent and project arboriculturist.

11 Construction Phase

- 11.1 Protective fencing and other measures shown will be maintained in accordance with agreed plans for the duration of each particular phase / operation or until construction is complete (as applicable). No changes are permitted without consultation with the project arboriculturist and agreement of the Tree Officer.
- 11.2 **Excavations within the RPA**
- 11.3 No excavation has been identified within the RPA of retained trees. Should changes be required which result in such works these would need to be agreed with the Local Planning Authority and project arboriculturist and the following methodology will adhered to.
- 11.4 Manual excavation seeks to avoid this damage by exposing roots before severance and cutting them cleanly using appropriate tools when necessary. Exposed root ends are minimised and can be better protected from incidental damage.
- 11.5 Typically, 82% of the roots of broadleaved trees and 70% of conifer roots are found in the top 500mm of soil, with root networks usually decreasing rapidly below this depth. Excavations below 500mm may require trenches to be shuttered to protect operatives from injury if the walls collapse. Shuttering is likely to preclude retention of roots.
- 11.6 Proposed excavation within the RPA will be conducted by hand and under direct arboricultural supervision. Ideally an air spade should be used but this is often not possible in heavy soils when hand tools will be used instead.
- 11.7 Spoil should be removed from the RPA by hand. Motorised barrows may be used over ground boarding. Spoil may be loaded into the bucket of a digger as long as the digger itself is located outside the RPA and the bucket does not bear on the ground.
- 11.8 A trench will be dug in the positions shown in the MWA tree protection plan. Once exposed roots below 25mm diameter will be severed and the now isolated soil on the far side of the trench may be removed in the usual manner as any roots within this soil would no longer be attached to the tree.

11.9 Exposed roots will be severed by the project arboriculturist using secateurs or a hand saw to leave a wound of the lowest cross section possible. Exposed roots / cut faces will be protected by damp hessian (dry if frost is likely) and recovered with topsoil at the earliest opportunity. Hessian wraps should be dampened periodically in hot weather.

11.10 Protective materials will be removed and backfilling completed as soon as possible once operations are complete. Plastic sheeting will be used to prevent contamination by cement if this is required for adjacent construction.

11.11 If roots over 25mm are found the arboriculturist will determine if these may be severed in consultation with the Tree Officer. A record of the works, including photographs and the size and number of roots over 10mm diameter should be produced.

11.12 Installation of Services (underground and above ground services)

11.13 Since trenching for the installation of underground services severs any roots present and may change the local soil hydrology in a way that adversely affects the health of the tree, in the event of works being required, particular care will be taken in the routeing and methods of installation of all underground services.

11.14 If required, the project arboriculturist will discuss the routing of underground services as soon as the requirement is identified. Guidance offered in NJUG will act as reference for working methods.

11.15 Extra precautions will be taken if it is necessary to use concrete near to or within the RPAs of retained trees. This is necessary to prevent potential soil contamination in areas where roots are likely to be present either directly (spillage) or leaching. These include:

- Holes will be excavated by hand;
- An impermeable membrane will be used to line the hole to protect surrounding soil before pouring concrete;
- No concrete is to be mixed within an RPA;
- Excess/spilt concrete will be removed upon completion of works.

11.16 Additional precautions outside the exclusion zone

11.17 Planning of site operations will take sufficient account of wide loads, tall loads and plant with booms, jibs and counterweights (including drilling rigs), in order that they can operate without coming into contact with retained trees.

11.18 Such contact can result in serious damage to the trees and might make their safe retention impossible. Consequently, any transit or traverse of plant in proximity to trees will be conducted under the supervision of a banks man, to ensure that adequate clearance from trees is maintained at all times. Access facilitation pruning will be undertaken where necessary to maintain this clearance. NOTE: In some instances LPA consent for pruning may be required.

11.19 Fires are prohibited due to the likely proximity of retained vegetation. NOTE: Local environmental health authorities might also have specific restrictions relating to fires.

11.20 Any materials whose accidental spillage would cause damage to a tree will be stored and handled well away from the outer edge of its RPA. It is essential that allowance will be made for the slope of the ground so that damaging materials such as concrete washings, mortar or diesel oil cannot run towards trees.

12 Sequencing of works & supervision

12.1 Phase 1a – Pre start – relevant stakeholders to be made aware of AMS and sequencing of works. These include:

- Site Manager (TBC)
- Arboriculturist (M Bisley – MWA Arboriculture Ltd)
- LPA tree officer
- Engineer
- Appointed tree works contractor

12.2 The agenda of this meeting will cover installation of tree protection mitigation, operating rules, scope of tree works, phasing and landscape operations if information available.

12.3 Phase 1b – Enabling works prior to practical start to be inspected by arboriculturist to include:

- Tree works as per MWA TPP
- Protective fencing as per AMS
- Trouble shooting

12.4 Phase 2 – Demolition phase - monitoring visit(s)

- Position and specification of fencing to be assessed (unscheduled visits)
- Assessment for unauthorised encroachment in exclusion zones (unscheduled visits)
- Supervision of works (if required)
- Trouble shooting with site manager

12.5 Phase 3 – Construction phase - monitoring visit(s)

- Position and Specification of Fencing to be assessed (unscheduled visits)
- Assessment for unauthorised encroachment in exclusion zones (unscheduled visits)
- Supervision of works (if required)
- Trouble shooting with site manager

12.6 Phase 4 – Practical completion and Landscaping (hard and soft)

- Arboriculturist to meet with site manager
- Final monitoring report to be completed

-
- 12.7 **SUPERVISION VISITS WILL BE RECORDED USING MWA SITE MONITORING FORM TO BE ACCOMPANIED BY PHOTOGRAPHS. THIS INFORMATION CAN BE MADE AVAILABLE TO THE LPA UPON THEIR REQUEST.**

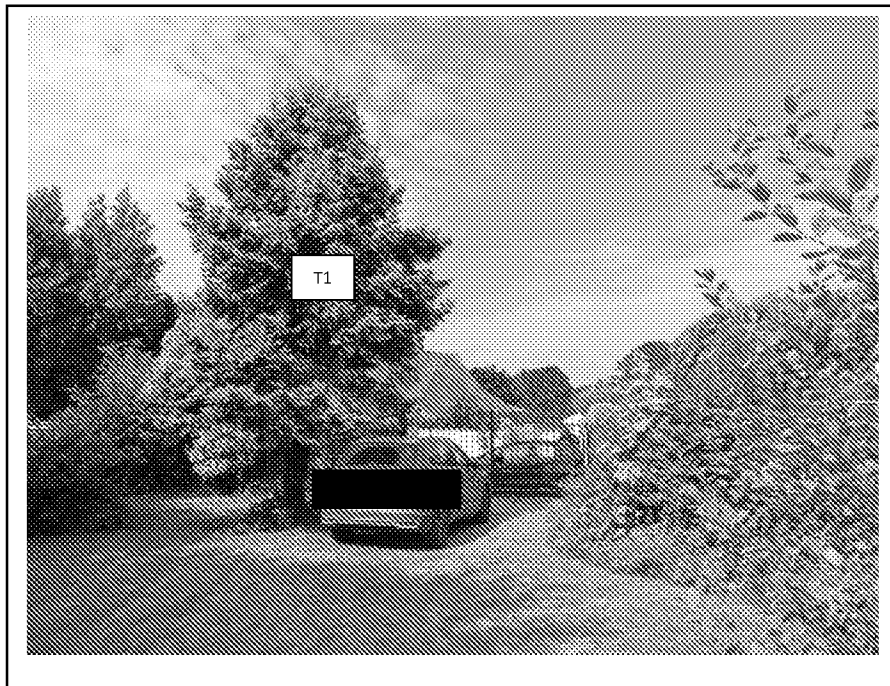
13 Conclusions

- 13.1 There is significant vegetation adjacent to the site which falls within the constraints of BS 5837:2012.
- 13.2 A total of 15 individual trees, seven collections and a hedge were recorded during the survey. One category B tree, four category C trees and three category C collections will need to be removed to accommodate development, with a category C hedge partially removed.
- 13.3 Provided that development works take place in accordance with the method statements specified in this report, the works will not be detrimental to the retained vegetation.
- 13.4 All technical issues relating to arboriculture should be addressed to MWA Arboriculture Ltd in the first instance. MWA Arboriculture Ltd will liaise between the Local Planning Authority and any interested parties.
- 13.5 It is suggested that the development proceeds in accordance with the above recommendations with the use of condition(s) to ensure the appropriate methods of working are agreed and any necessary site supervision/enabling works are correctly sequenced prior to the commencement of construction work.

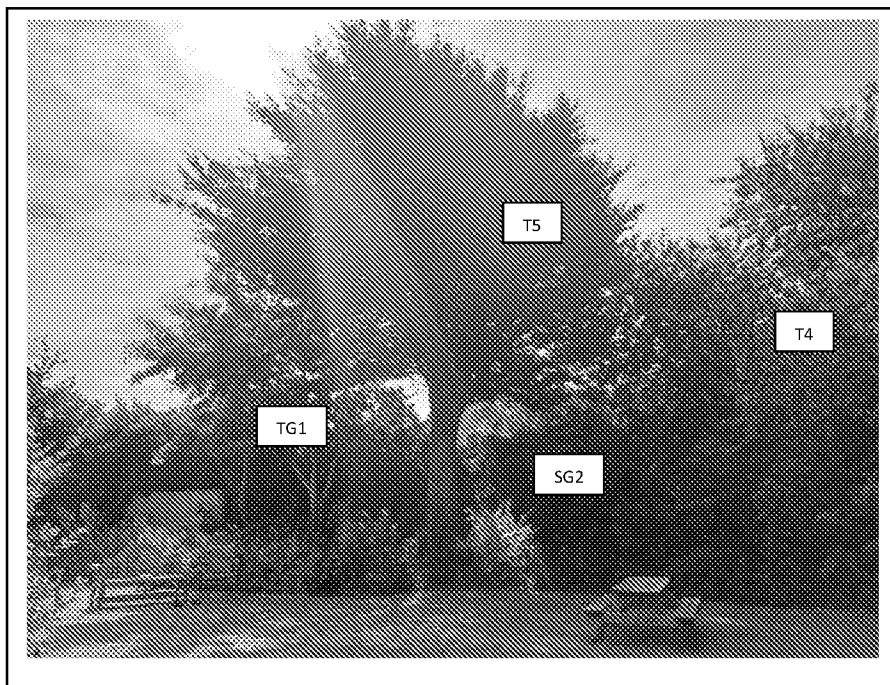
Appendix 1 – Key Contacts

Position	Organisation	Name	Contact Info
Project Arboriculturist	MWA Arboriculture Ltd	Mark Bisley	
LPA Tree Officer	Arun District Council	TBC	TBC
Site Manager	TBC	TBC	TBC

Appendix 2 – Images



View of entrance



View of T5



View of SG3

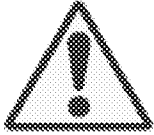


View of H1 from front garden

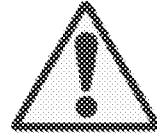
Appendix 3 – Site Monitoring Form

Arboricultural Monitoring & Supervision Record			
Site Address			
MWA Consultant			
Date of visit			
Also in attendance			
Purpose of Visit			
Monitoring	Supervision	Spot-Check	Meeting
Observations			
	As per AMS/TPP?	Breach?	S Manager aware?
Protective Fencing			
Ground protection			
Signage			
Storage			
Access/egress			
Tree Works			
Underground services			
Comments			
Signed:			
Dated:			

Appendix 4 – Example handout for site operatives when working with RPAs



Precautions When Working Close to Trees



The following points are designed to prevent damage to both the visible and below ground parts of the tree. Failure to work in line with the points set out below is likely to result in damage to trees and may result in action by the Local Planning Authority such as a stop notice or prosecution.

- Works stipulated in the approved **Tree Protection Plan** and Arboricultural Report will be completed before other works on the site begin. No other tree pruning is permitted without written permission from the Project Arboriculturist.
- If required **Protective Fencing** is to be installed in accordance with the approved Tree Protection Plan before the start of any construction activities, including demolition or placing of site offices.
- **Protective Fencing** will remain in place until the end of the build unless approval for its removal is provided in writing by the Project Arboriculturist.
- If required **Ground Protection** is to be installed in accordance with the approved Tree Protection Plan before the start of any construction activities, including demolition or placing of site offices.
- **Ground Protection will remain in place** until the end of the build unless approval for its removal is provided in writing by the Project Arboriculturist.
- **Excavations within the Root Protection Areas of retained trees (RPAs)** must be conducted in **strict accordance with the AMS** and in accordance with site specific briefing provided by the Project Arboriculturist.
- Only those **underground services** shown in the approved plans will be routed through the RPA of retained trees without consultation with the Project Arboriculturist. (See above regarding excavation within RPAs.)
- **No storage of chemicals or other materials** is allowed within the RPA of retained trees irrespective of ground protection. Materials should not be stored uphill of retained trees or their RPAs.
- **No mixing of concrete or other potentially toxic materials** is permitted within the RPAs of retained trees.
- **No fires are permitted within RPAs or close to retained trees**, irrespective of local Council policy.
- **Banksman** will be used whenever plant is operating close to retained trees.
- **No plant may operate within the RPA of retained trees** without appropriate ground protection in place.
- Details for the **Project Arboriculturist** may be obtained from the Site Agent.

Notes:

The original of this drawing was produced in colour - a monochrome copy should not be relied upon.

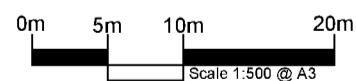
Do not scale from this drawing.

Tree locations were plotted from a topographical survey.

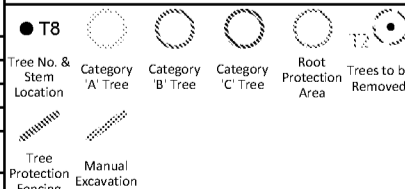
We are not aware of any statutory protection relating to trees on or adjacent to the site at the time of writing.

It is an offence to damage any part of a protected tree, including the roots.

Full planning permission supersedes this protection in relation to the development. Subsequent works would require permission in the usual manner.



MWA Key

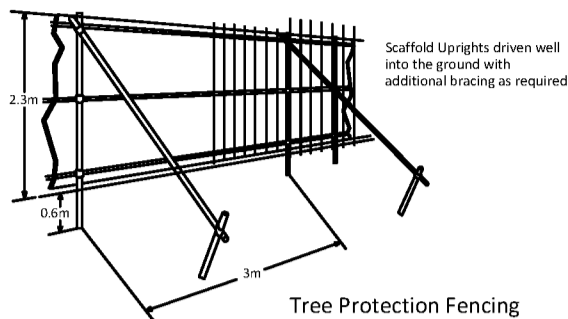


Tree Categories

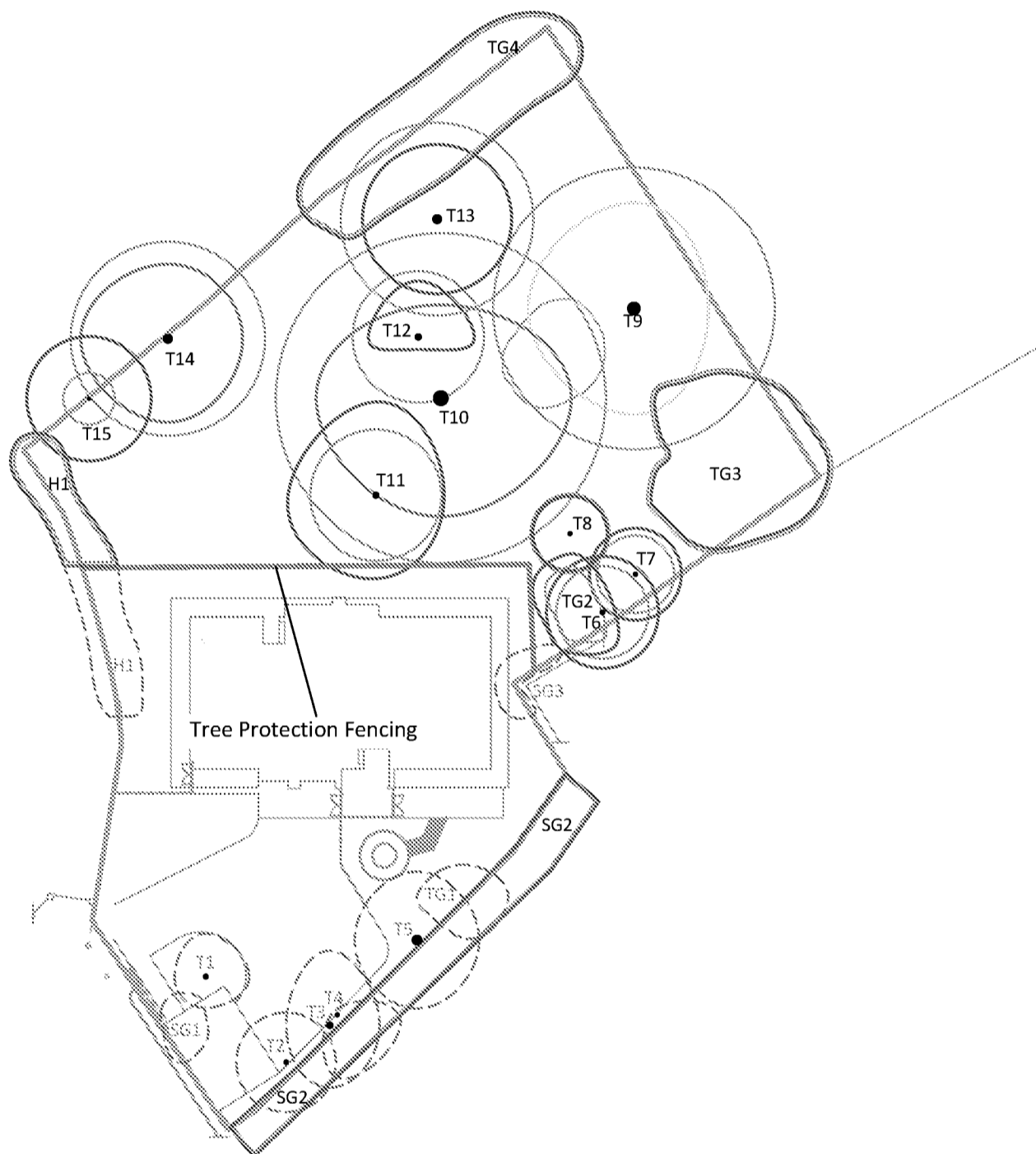
Trees have been assigned a category in accordance with Table 1 of BS 5837:2012 'Trees in Relation to Design, Demolition and Construction'. The category is shown by the colour of the canopy edge (and canopy hatch where present).

Categories are shown as below:
• Category 'A' - Tree of high quality and value - Green
• Category 'B' - Tree of moderate quality and value - Blue
• Category 'C' - Tree of low quality and value - Grey
• Category 'U' - Tree of significantly reduced potential - Dark Red

20mm exterior grade ply and/or weldmesh wired to uprights and horizontals. Wire twisted and secured on inside face of fencing to avoid easy dismantling



Tree Protection Fencing



Tree Protection Fencing

Tree Protection Fencing Locations

Tree No.	Minimum Distance from stem unless otherwise stated
T10	11.35m to S
T11	5.35 m to S
TG2	Edge of crown to W

Tree Works

Tree No.	Category	Species	Works and reason for works
T1	C	Blue spruce	Remove due to proximity of development
T2	C	Bay	Remove as below footprint of development
T3	C	Plum	Remove due to proximity of development
T4	C	Euonymus	Remove due to proximity of development
T5	B	Monterey cypress	Remove due to proximity of development
TG1	C	Mixed	Remove due to proximity of development
SG1	C	Mixed	Remove as below footprint of development
SG3	C	Euonymus	Remove due to proximity of development
H1	C	Mixed	Remove S end due to proximity of development

Tree No.	Species	Ht. (m)	Stem Dia. (mm)	CS	CS	CS	CS	Crown Ht. (m)	Age Class	General Observations	ERC (Y)	RPA Radius	BS
T1	Blue spruce	8.0	320	3.50	3.50	2.50	2.50	1.5 E	SM	Established ornamental tree. Drive close to stem to N.	10+	3.84	C1
T2	Bay	7.0	6 x 120	4.00	4.00	4.00	4.00	2.0 N	EM	Established ornamental tree. Multiple stems from ground level. Topped in past. Provides a short length of screen.	10+	3.53	C2
T3	Plum	9.0	280, 320	6.00	4.50	5.00	3.50	1.0 N	M	Mature tree with 2 stems from ground. Suppressed from E by adjacent tree. No significant recent management. Provides some screen.	10+	5.11	C2
T4	Euonymus	7.0	240	0.50	5.00	5.00	0.50	3.0 E	M	Single stem with crown forming mostly to SE. Poor structure. Some screening benefits.	10+	2.88	C2
T5	Monterey cypress	13.0	700	5.50	5.00	5.50	5.00	2.5 N	M	Mature tree. Past lift to ~4m. Crown and structure appear typical for the species.	20+	8.40	B1
T6	Sycamore	9.0	310	4.50	4.50	4.50	4.50	1.5 N	SM	Likely self-seeded tree adjacent to boundary. Of no particular arboricultural merit. Provides a length of screen.	10+	3.72	C2
T7	Sycamore	9.0	260	3.70	3.70	3.70	3.70	1.5 N	SM	Likely self-seeded tree adjacent to boundary. Of no particular arboricultural merit. Provides a length of screen.	10+	3.12	C2
T8	Deodar cedar	8.0	265	3.00	3.00*	3.00*	3.00*	2.0 W	SM	Established ornamental tree.	10+	3.18	C1
T9	Goat willow	10.0	460, 500, 400, 350, 300, 300	8.50	6.00	8.50	8.50	0.0 W	M	Mature, former coppice. No recent management. Base obscured by ivy and brambles.	10+	11.32	A1
T10	Monterey cypress	17.0	1105	7.50	10.50	9.50	10.00	1.0 W	M	Mature tree in middle of garden. Multiple stems from 1m.	20+	13.26	B1
T11	Pedunculate oak	10.0	405	7.50	5.50	6.70	7.00	1.0 S	SM	Established ornamental tree. Suppressed by more mature cypress to E.	20+	4.86	C1
T12	Pine	13.0	440	4.50	4.50	1.00	4.00	4.0 W	EM	Established ornamental tree. Suppressed by more mature cypress to S.	10+	5.28	C1
T13	Evergreen oak	11.0	390, 345, 340, 170	6.00	6.00	6.00	6.00	1.5 W	M	Established ornamental tree.	20+	7.74	C2
T14	Monterey cypress	14.0	8 x 375*	6.00*	6.00	6.70	7.00	3.0 S	M	Mature tree close to boundary. Multiple stems from near ground now forming dense block – possibly many fused. Provides a length of screen in views over adjacent fields.	20+	7.80	B2
T15	Tree cotoneaster	5.5	85, 90, 120	5.00	5.00	5.00	5.00	1.5 S	M	Small ornamental tree. Provides a length of screen in views over adjacent fields.	10+	2.07	C2
TG1	Holly, Laburnum	8.0	140	3.50	2.00	4.00*	1.00	2.5 N	EM	Pair of established ornamental trees. High lifts in past.	10+	1.68	C2

Tree No.	Species	Ht. (m)	Stem Dia. (mm)	CS	CS	CS	CS	Crown Ht. (m)	Age Class	General Observations	ERC (Y)	RPA Radius	BS
TG2	Holly, Sycamore	9.0	165	3.50	3.50	3.50	3.50	0.0 N	SM	Likely self-seeded sycamore previously coppiced. Holly single stem. Block of vegetation within garden.	10+	1.98	C1
TG3	Silver birch, Rowan, Sycamore	9.0	Max. 280	3.00	3.00	3.00	3.00	1.0 W	SM	Collection of mostly ornamental trees to rear of garden.	10+	3.36	C2
TG4	Hazel, Sycamore	13.0	350*	4.50	4.50	4.50	4.50	3.0 W	EM	Line of trees on fence line – both sides and some through fence. Provide a length of screen in views over adjacent fields.	10+	4.20	C2
SG1	Pittosporum, Euonymus, Buddleia	3 – 6	Max 120	2.00	2.00	2.00	2.00	0.0 E	EM	Collection of vegetation on boundary adjacent to road. Some screening value	10+	1.44	C2
SG2	Mostly Euonymus	4.0	60*	0.50	3.00*	3.00*	3.00*	0.0 N	M	Offsite shrubs forming a dense, low-level screen.	10+	0.72	C2
SG3	Euonymus	4.5	Max. 165	2.00	2.00	2.00	2.00	1.0 N	M	Larger shrub has extensive basal decay in main stem. Smaller in fair condition. Regularly cut back from adjacent house.	10+	1.98	C1
H1	Cypress, Plum	7.5	220*	2.70	2.70	2.70	2.70	0.0 E	SM	Line of cypress with one plum towards northern end. Faces trimmed. Topped in past. Provide a length of screen on the boundary with adjacent house.	10+	2.64	C2

Headings and Abbreviations:

No.	Allocated sequential reference number - Tree ('T'), Group ('G'), Woodland ('W') or Hedge ('H') reference number - refer to plan and to numbered tags where applicable
Species:	Common name
Height:	In metres, to half nearest metre – where possible approximately 80% are measured using an electronic clinometer and the remainder estimated against the measured trees. In the case of Groups and Woodlands the measurement listed is that of the highest tree
Stem Diam.:	Stem diameter in millimetres, to nearest 10mm - measured and calculated as per Annex C of BS5837:2012. MS = multi-stemmed, TS = twin-stemmed
Branch Spread:	Crown radius measured (or estimated where considered appropriate) from the four cardinal points (north, east, south and west) to give an accurate visual representation of the crown
Crown Height:	Existing height above ground level, in metres, of first significant branch and direction of growth (e.g. 2.5-N) and of canopy at lowest point – to inform on crown to height ratio, potential for shading, etc.
Age Class:	Estimated age class - Y = young, SM = semi-mature, EM = early-mature, M = mature, PM = post-mature
ERCY:	Estimated Remaining Contribution - in years as per BS5837:2012 (i.e. <10, 10+, 20+, 40+)
BS Cat.:	Category Grading - tree retention value listed as U, A, B or C - in accordance with BS5837:2012 Table 1
RPA Radius (m):	Root Protection Area Radius - in metres measured from the centre of the stem to the line of tree protection
* (Estimated Dimensions):	Where trees are located off-site, or are inaccessible for any other reason, and accurate measurements or other information cannot be taken then the information provided is estimated and is duly suffixed with a "e" symbol
† (Protected Tree)	Where trees are protected by a Tree Preservation Order (TPO) the Tree No. will have a "+" symbol as a suffix.

List of Common & Scientific Names

Bay	<i>Laurus nobilis</i>	Euonymus	<i>Euonymus sp.</i>	Pine	<i>Pinus sp.</i>
Birch, Silver	<i>Betula pendula</i>	Hazel	<i>Corylus avellana</i>	Plum	<i>Prunus sp.</i>
Buddleia	<i>Buddleja sp.</i>	Holly	<i>Ilex aquifolium</i>	Rowan	<i>Sorbus aucuparia</i>
Cedar, Deodar	<i>Cedrus deodara</i>	Laburnum	<i>Laburnum anagyroides</i>	Spruce, Blue	<i>Picea pungens</i>
Cotoneaster, Tree	<i>Cotoneaster x watereri</i>	Oak, Evergreen	<i>Quercus ilex</i>	Sycamore	<i>Acer pseudoplatanus</i>

Cascade chart for tree quality assessment (BS 5937:2012)

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention (see Note)			
Category U Those 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	<ul style="list-style-type: none">Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)Trees that are dead or are showing signs of significant, immediate and irreversible overall declineTrees 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 <p><i>NOTE: Category U trees can have existing or potential conservation value which it might be desirable to preserve</i></p>		
Trees to be considered for retention	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation
Category A Trees of high quality with an estimated life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees groups of woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical commemorative or other value (e.g. veteran trees or wood pasture)
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	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 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	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	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	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	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/transient landscape benefits	Trees with no material conservation or other cultural value