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## ARBORICULTURAL REPORT

for proposed development at

### BIGLIS TO DINAS POWYS ACTIVE TRAVEL ROUTE

<b>Client:</b>	Arcadis
<b>Site Address:</b>	Land between Biglis and Dinas Powys, Vale of Glamorgan
<b>Our Reference:</b>	S230621.1
<b>Author:</b>	John Mitchener
<b>Report Date:</b>	November 2024

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## 1 INTRODUCTION

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### 1.1 INSTRUCTIONS

- 1.1.1. TR33 Environments have been instructed by Arcadis to provide this report in support of a planning application for the development of land near the A4055 Barry Road including along Heol Y Ffrienhines and St Cadoc's Avenue (hereafter referred to as 'the Site').
- 1.1.2. The purpose of this report is to provide the information necessary for Vale of Glamorgan Council to meet the duty placed upon them by s.197 of the Town and Country Planning Act 1990. This duty requires that local planning authorities '*ensure, whenever it is appropriate, that in granting planning permission for any development adequate provision is made, by the imposition of conditions, for the preservation or planting of trees*'.
- 1.1.3. This report assesses the potential effects of development on trees and puts forward proposals for mitigation where appropriate. In order to avoid additional, or otherwise unforeseen adverse arboricultural impacts, it is essential that the mitigatory measures described within this report are implemented in full during site clearance and construction.

### 1.2 SCOPE OF REPORT

- 1.2.1. This report provides information on the arboricultural baseline and the likely arboricultural impacts associated with the construction of a shared footway/cycleway between Biglis Farm and Dinas Powys (hereafter referred to as the 'Proposed Scheme'). Details of the Proposed Scheme are provided in **Appendix C: Tree Retention / Removal Plan**.
- 1.2.2. The scope of this report has been determined with reference to British Standard BS 5837:2012 *Trees in relation to design, demolition and construction – Recommendations*<sup>1</sup>(BS 5837). It includes reference to the following:
- A tree survey schedule.
  - An Arboricultural Impact Assessment.
  - An Arboricultural Method Statement.
  - A Tree Retention / Removal Plan.
- 1.2.3. Root protection areas (RPAs) have been identified and represent the minimum area around a tree (m<sup>2</sup>) deemed to contain sufficient roots and rooting volume to maintain a tree's viability. The RPA, initially plotted as a circle, has been adjusted to account for constraints to root growth such as retaining walls, carriageways and building foundations.

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<sup>1</sup> British Standards Institute. 2012. *BS 5837: 2012 Trees in relation to design, demolition and construction – Recommendations*. London: BSI.

- 1.2.4. The BS 5837 gives recommendations and guidance on the relationship between trees and the design, demolition and construction process. It sets out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures. These recommendations and guidance have been applied throughout this report and form the basis of the Arboricultural Impact Assessment (AIA), Arboricultural Method Statement (AMS) and Tree Protection Plan (TPP).

### **1.3 VALIDITY PERIOD**

- 1.3.1. Trees are dynamic organisms which are influenced by a variety of environmental variables and whose health and condition can rapidly change. Because of this any recommendations made within this report are valid for a period of 24 months from the date of survey or when any site conditions change or pruning or other works unspecified in this report are carried out to, or affecting, the subject trees, whichever is sooner.



## 2 BASELINE ARBORICULTURAL RESOURCE

### 2.1 BASELINE DATA COLLECTION

#### Desktop Study

- 2.1.1. A desktop study was undertaken in November 2023. The purpose of the desktop study is to identify the presence of statutory and environmental designations which may apply to arboricultural features within the study area.
- 2.1.2. The desktop study reviewed existing information available in the public domain. The sources of information presented in **Table 1** were consulted to inform the desktop study.

**Table 1: Data sources used to inform the desktop study**

Source	Summary
Vale of Glamorgan Council	Tree Preservation Orders and conservation areas <sup>2</sup>
Ancient Tree Forum	Ancient and veteran trees
Natural Resources Wales	Ancient woodland

#### Tree Survey

- 2.1.3. The tree survey was undertaken between December 2023 and January 2024. The survey was conducted by Alfred Slater (Arboricultural Consultant) with topographical survey data, Ordnance Survey MasterMap and aerial imagery used as base mapping.
- 2.1.4. The results of the tree survey are presented in **Appendix B: Tree Survey Schedule** and **Appendix C: Tree Retention / Removal Plan**.
- 2.1.5. The tree survey has been undertaken with reference to BS 5837. The tree survey was undertaken without reference to any site layout proposals; tree quality assessments account for health, condition and an estimated remaining contribution based on current site conditions.
- 2.1.6. Further details on the methodology used to obtain tree survey data are provided in **Appendix B: Tree Survey Methodology**.

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<sup>2</sup> Vale of Glamorgan Council , 2023 . *My Maps* . [online] Available at: <https://myvale.valeofglamorgan.gov.uk/myCouncil.aspx> [Accessed 02 November 2023].

## 2.2 BASELINE ARBORICULTURAL RESOURCE

### Study Area

- 2.2.1. The arboricultural study area is defined as the Proposed Scheme plus a 15m buffer. A 15m buffer has been applied as a means of ensuring compliance with BS 5837 which recommends that all trees whose Root Protection Areas (s) extend into the developable area are surveyed and any impacts subsequently assessed. The BS 5837 caps RPAs with a maximum radius of 15m.
- 2.2.2. The extent of the study area is shown in **Appendix C: Tree Retention / Removal Plan**.

### Desktop Study

- 2.2.3. Findings from the desktop study indicate that the study area does not include any ancient and veteran trees or ancient woodland. Also, there are no conservation areas or Tree Preservation Orders.

### Tree Survey

- 2.2.4. The baseline arboricultural resource comprises 168 individual trees, ten tree groups, 17 wooded areas and 29 hedges.
- 2.2.5. The baseline arboricultural resource includes 35 moderate-quality trees, seven moderate-quality wooded areas and two moderate-quality domestic hedges. It further includes 127 low-quality trees, 10 low-quality tree groups, ten low-quality wooded areas and 27 low-quality hedges. An additional six individual trees were identified as of very-low quality with anticipated retention spans of less than 10 years under current site conditions.

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### 3 ARBORICULTURAL IMPACT ASSESSMENT

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- 3.1.1. The scope of this Arboricultural Impact Assessment (AIA) has been established with reference to BS 5837 Clause 5.4 '*Arboricultural Impact Assessment*'. The scope of assessment is defined as including an evaluation of the direct and indirect arboricultural effects of the Proposed Scheme.
- 3.1.2. This AIA includes specific reference to the effects of any tree loss and other potentially damaging activities which would foreseeably occur in the vicinity of retained trees. Further reference is made concerning recommendations for mitigation, including those matters which require inclusion within an Arboricultural Method Statement (AMS).
- 3.1.3. The spatial relationship between surveyed trees and the Proposed Scheme is presented within **Appendix C: Tree Retention / Removal Plan**.

#### 3.2 ASSUMPTIONS AND LIMITATIONS

- 3.2.1. This AIA is subject to the following assumptions and limitations.

##### **Assumptions**

- That where reasonably practicable, it will be possible to make minor adjustments to the Proposed Scheme where these will enable potential arboricultural impacts to be avoided or reduced. Opportunities for minor adjustments will be identified during detailed design and may include alterations to the alignment or slight reduction in width.
- The opportunities to use a tree friendly construction methodology exist on land between the Dinas Powys Skate Park and Heol Y Frenhines. The scope of the tree friendly construction techniques shall accord with recommendations included within BS 5837 and may extend to the use of minimal dig construction with retained permeability to air and water.

##### **Limitations**

- Until such time as a contractor is appointed, the exact details of how work will be undertaken remain unknown. This includes elements which are of relevance to trees including items such as specific working practices, the space needed for access and materials storage and the size and type of machinery which is to be used.

### 3.3 POTENTIAL ARBORICULTURAL IMPACTS

3.3.1. An assessment of potential arboricultural impacts and likely arboricultural effects associated with the Proposed Scheme is provided in **Table 1**.

**Table 2: Assessment of potential arboricultural impacts and likely arboricultural effects**

Activity	Potential impact and proposed mitigation	Likely effect
Construction of proposed footway/cycleway	<p>Tree removal due to:</p> <ul style="list-style-type: none"> <li>Positioning of individual trees within the alignment of the proposed footway/cycleway,</li> <li>The proposed footway/cycleway encroaches substantially into the RPA of individual trees such that sustainable retention is not viable.</li> </ul> <p>Potential adverse impacts include the loss of two low-quality common ash trees (<i>Fraxinus excelsior</i>) (T35 and T36), the partial removal of four low-quality mixed-broadleaved wooded areas (W335, W345, W346 and W348) and the partial removal of two low-quality mixed broadleaf tree groups (G383 and G403. In addition to two individual trees, the overall area of tree removal equates to approximately 1,306m<sup>2</sup>.</p> <p>The requirement to remove trees, wooded areas and tree groups has arisen due to the fact that they are positioned directly within the alignment of the proposed shared footway/cycleway or have RPAs which will be substantially compromised. On this basis, and in the absence of substantial changes to the alignment of the proposed footway/cycleway, there is negligible opportunity to avoid, or reduce, the overall scope of tree removals.</p> <p>Potential adverse arboricultural impacts shall be compensated for through the planting and establishment of new trees. This replacement planting will be undertaken with due regard for the multiple benefits that trees provide including habitat, landscape character, air quality and climate moderation. Planting with therefore be undertaken using native tree species and at a minimum ratio of three replacement trees, or area of trees, for each one removed.</p>	<p>The likely effects of tree removal will be slight adverse. This is because only low-quality arboricultural features will be impacted and also because only a relatively small area of trees will be removed.</p> <p>Low-quality arboricultural features are those with no particular arboricultural merits and those which present few visual, conservation or cultural benefits. Also, although they have life-expectancies which exceed ten years they generally insufficiently aged or unique so as to limit opportunities for compensation.</p> <p>Adverse arboricultural effects shall be mitigated through a robust programme of new tree planting. This will, over time, not only mitigate for tree removals but is also likely to generate arboricultural benefits. Benefits will arise due to an increase in the treed area which currently exists with associated improvements from an environmental and biodiversity perspective.</p> <p>Additionally, tree removals will occur within an area of land to which there is currently no public access or obvious views from the public realm. This means that impacts to public amenity will be negligible.</p> <p>Adverse effects will therefore be temporary in nature and will transition to benefits once the replacement planting becomes established.</p>

Activity	Potential impact and proposed mitigation	Likely effect
<p><b>Construction of proposed footway/cycleway</b></p>	<p>Construction of the proposed footway/cycleway has the potential to encroach into the RPAs of 12 moderate-quality trees, 28 low-quality trees, three low-quality tree groups, two low-quality wooded areas and one low-quality hedge. These arboricultural features are defined as 'at risk' on the basis that their roots, and rooting environment, may become damaged during construction.</p> <p>Construction impacts to 'at risk' arboricultural features cannot be fully quantified due to an absence of detailed design information and the working methodology which will be adopted by the contractor. Notwithstanding, in the absence of any mitigation, construction impacts could foreseeably extend from a minor and/or transitory loss of physiological function to significant physiological and/or structural damage, possibly to the extent where trees become unsustainable and need to be removed.</p> <p>Potential adverse construction impacts shall be avoided or minimised through the implementation of the following actions:</p> <ul style="list-style-type: none"> <li>The alignment of the proposed footway/cycleway shall be reviewed during detailed design. Where appropriate, minor alterations to its alignment and width will be adopted in instances where these can provide identifiable arboricultural benefits. Arboricultural benefits will include the avoidance of RPAs or the minimisation of any encroachment.</li> <li>A tree friendly design shall be adopted where this achievable given all applicable design constraints. The tree friendly design shall apply in instance where the proposed footway/cycleway encroaches into the RPA of tree which could be otherwise retained. The scope of the tree friendly design shall accord with recommendations included within BS 5837 and will extend to the use of minimal dig construction techniques which retain permeability to air and water.</li> </ul> <p>'At risk' trees T129, T133-T138, T140-T143, T146, T147, T150, T152, T154, T160, T162, T164, T169, T174, T176-T178, T180, T183, T184, T186-T188 and T191 and wooded area W362 are all positioned on land between the Dinas Powys Skate Park and Heol Y Frenhines. These features, which comprise 11 moderate-quality trees, 20 low-quality trees and one low-quality wooded area, would all benefit from the adoption of a tree friendly design. Were a tree friendly design to be adopted within the RPAs of these features, then likely construction impacts could reasonably be almost entirely eliminated.</p> <ul style="list-style-type: none"> <li>Residual impacts, which may exist after a design review and specification of a tree friendly design, shall subsequently be assessed by an arboriculturist. This assessment shall consider the degree of encroachment into the RPA and the likely impacts to roots. In instances where significant root loss can be discounted, then trees shall be retained. The assessment of likely impacts to roots will be supported by site investigation, such as hand dug trial pits, where appropriate.</li> </ul> <p>In instances where significant root loss cannot be discounted then a specification of specific work such as coppicing or pollarding, will be explored in instance where this may facilitate retention. The results of the assessment shall be incorporated into the provision of a revised AMS. The AMS shall be revised to reflect the presence of retained trees and the tree protection measures that will be required to adequately protect them during construction.</p> <p>Potential adverse arboricultural impacts to 'at risk' arboricultural features shall be compensated for through the planting and establishment of new trees. Replacement planting shall be specified in instances where trees are to be removed or where there is a substantial loss of quality or reduction in life-expectancy. This replacement planting will be undertaken with due regard for the multiple benefits that trees provide including habitat, landscape character, air quality and climate moderation. Planting with therefore be undertaken using native tree species and at a minimum ratio of three replacement trees, or area of trees, for each one removed.</p>	<p>Adverse effects associated with 'at risk' trees cannot be discounted but are unlikely to be significant.</p> <p>It is anticipated that adverse effects will include a loss of quality and value to some of the trees. This may be permanent in nature but in some cases will also be transitory.</p> <p>Permanent adverse effects will only occur in instances where trees are subject to substantial root disturbance such that they cannot fully recover. Transitory adverse effects are more likely, and will generally occur, in instances where root disturbance is less severe and where, over time, trees recover and re-grow.</p> <p>Permanent adverse effects shall be mitigated through a robust programme of new tree planting. This will, over time, not only mitigate for tree removals but is also likely to generate arboricultural benefits. Benefits will arise due to an increase in the treed area which currently exists with associated improvements from an environmental and biodiversity perspective.</p>

Activity	Potential impact and proposed mitigation	Likely effect
<b>Access during construction</b>	<p>Tree removal associated with the provision of access for personnel, plant, materials and storage during construction.</p> <p>Tree removal shall be avoided wherever this is reasonably practicable. Construction access shall, wherever possible, utilise areas outside the RPA of retained trees or areas where tree removal has already occurred.</p> <p>Robust tree protection measures shall be deployed during construction. These will include the use of tree protection fencing, temporary ground protection and the direct arboricultural supervision of work within, or adjacent to, the RPA of any retained tree.</p> <p>Tree protection measures shall be specified within the AMS a draft copy of which is provided in <b>Section 4</b> of this report. This document shall be reviewed and updated prior to the commencement of construction and, where applicable, be reviewed and approved by Vale of Glamorgan Council.</p>	<p>There is no foreseeable reason why additional tree removal is likely to be required, subject to appropriate controls on access and the deployment of robust tree protection measures.</p> <p>Additional adverse arboricultural effects shall therefore be avoided.</p>

### 3.4 SUMMARY OF ARBORICULTURAL IMPACTS AND LIKELY EFFECTS

- 3.4.1. Adverse arboricultural impacts will arise from the unavoidable requirement to remove two low-quality trees, to partially remove four low-quality wooded areas and to partially remove an additional two low-quality tree groups. Combined removals include two individual trees and approximately 1,306m<sup>2</sup> of wooded area/tree group. The likely effects of removal, without mitigation, will be slight adverse.
- 3.4.2. The removal of arboricultural features will be compensated for by the establishment of new trees at a minimum ratio of three replacement trees, or area of trees, for each one removed. This new tree planting will ensure that adverse effects are transitory in nature and will, over time, ultimately become neutral. Furthermore, increasing the area of replacement planting by a ratio of 3:1 will ultimately increase the treed area above that currently exists. This has the potential to provide additional environmental and biodiversity benefits, once the replacement trees become established.
- 3.4.3. Construction of the proposed footway/cycleway has the potential to encroach into the RPAs of 12 moderate-quality trees, 28 low-quality trees, three low-quality tree groups, two low-quality wooded areas and one low-quality hedge. These arboricultural features are defined as 'at risk' on the basis that their roots, and rooting environment, may become damaged during construction.
- 3.4.4. Potential adverse construction impacts will be avoided or minimised through a design review, with modifications made where appropriate and the adoption of tree friendly design in specific locations. Additionally, the implantation of tree management practices which favour tree retention shall also be employed where removal may otherwise occur. The measures will ensure that 'at risk' trees are not subject to significant adverse effects.
- 3.4.5. Notwithstanding, any potential adverse effects associated with 'at risk' trees shall be compensated for through the establishment of replacement planting. This planting will ultimately negate these adverse effects and has the potential to provide some net benefits.
- 3.4.6. Adverse impacts which could potentially arise during construction will be avoided through the provision of an AMS for the protection of trees. A draft copy of this AMS is provided in **Section 4** of this report.

## 4 ARBORICULTURAL METHOD STATEMENT (HEADS OF TERMS)

- 4.1.1. This Arboricultural Method Statement (AMS) describes, in principle, the tree protection measures that shall be applied during site clearance and construction.
- 4.1.2. This AMS is a 'living document.' This means that it shall be reviewed, and where necessary updated, in response to changes to the design and/or construction methodology. It is envisaged that this AMS will be reviewed at the following stages of design and construction:
- Detailed design.
  - Contractor engagement.
  - Pre-commencement.
  - Prior to any instance where the overarching site clearance or construction methodology is amended.

### PHASING OF TREE PROTECTION MEASURES

- 4.1.3. It is essential that tree protection measures are phased correctly during construction. Tree protection measures shall be phased in the following manner:

1. Review likely tree removals and 'at risk' trees during detailed design and contractor engagement, reduce impacts wherever reasonably practicable.
2. Undertake tree removals.
3. Install tree protection fencing and ground protection, as specified within the AMS.
4. Site clearance and construction.
5. Remove tree protection and ground protection once all construction activities have ceased.
6. Undertake mitigatory tree planting.

### ARBORICULTURAL MONITORING AND SUPERVISION

- 4.1.4. Arboricultural monitoring and supervision shall be implemented in accordance with the following details.

#### ***Nominated Persons***

- 4.1.5. The client/contractor shall appoint a Project Arboriculturist. This person shall be suitably qualified and experienced in the field of trees in relation to construction, and shall be available to:
- Attend an initial pre-commencement meeting and supervisory visits as required.
  - Undertake site monitoring.
  - Advise on all ad-hoc arboricultural matters which may arise.

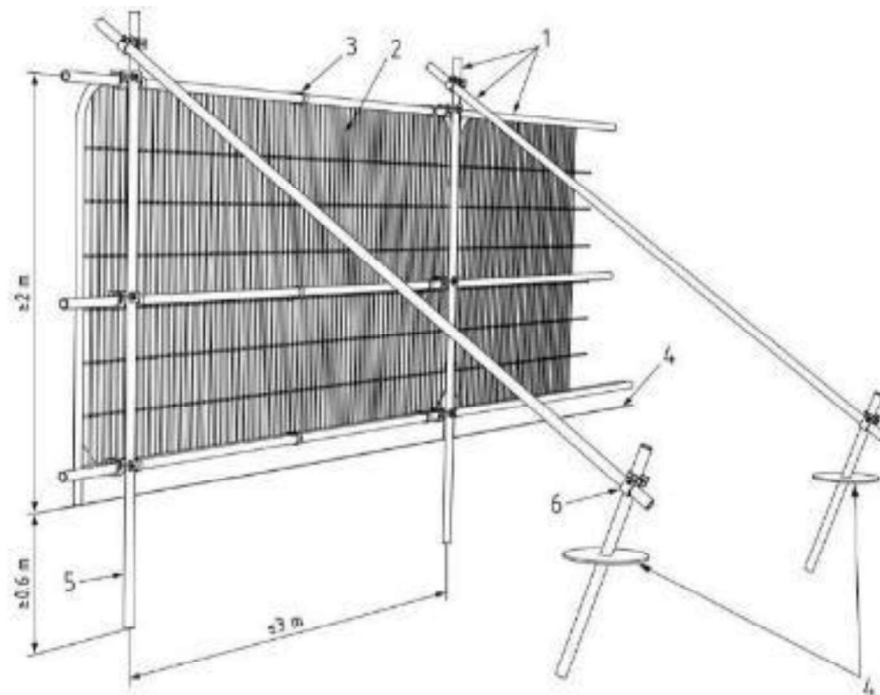


- 4.1.6. The client/contractor shall further nominate a person to be responsible for all arboricultural matters onsite. This person must:
- Be present on site whenever work which has the potential to cause damage to retained trees is being undertaken.
  - Be aware of their arboricultural responsibilities.
  - Have the authority to stop any work that is causing or has the potential to cause harm to any retained tree.
  - Be responsible for ensuring that all site operatives are aware of their responsibilities toward retained trees and the consequences of any failure to observe those responsibilities.
  - Make immediate contact with the Project Arboriculturist and/or Vale of Glamorgan Council in the event of any tree related problems occurring, whether actual or potential.
- 4.1.7. Once works commence the project arboriculturist will undertake a programme of monitoring. This may include phone and email contact with the site manager, regular site visits and the direct supervision of work which has the capacity to cause damage to retained trees. The frequency of any monitoring will be determined by the intensity and proximity of works to trees and will be flexible enough to accommodate changes in the scheduling of tasks as they occur.
- 4.1.8. The project arboriculturist will maintain a record of the arboricultural monitoring. This will provide a record of compliance with any agreed tree protection measures and will assist in the efficient discharge of planning conditions where required. The Project Arboriculturist shall provide Vale of Glamorgan Council with a written record of any monitoring within five working days of it having taken place.

#### **TREE PROTECTION FENCING**

- 4.1.9. Tree protection fencing will be erected in order to create a vertical barrier which prevents damage occurring to retained trees. It shall be fit for the purpose of excluding construction activity and appropriate to the degree and proximity of work taking place around the retained tree(s). Tree protection fencing shall be adequately maintained to ensure that it remains rigid and complete.
- 4.1.10. Once erected, tree protection fencing shall not be altered or removed without the explicit approval from the Project Arboriculturist and authorisation from Vale of Glamorgan Council.
- 4.1.11. A suggested specification for the tree protection fencing is provided in **Figure 1**.

**Figure 1: Suggested specification for tree protection fencing**



**Key to Figure 1**

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

## TEMPORARY GROUND PROTECTION

- 4.1.12. Temporary ground protection shall be installed in any instance where construction access is required within the RPA of any retained tree, tree group or hedge. Its purpose is to create a horizontal barrier which prevents rutting or additional compaction of the underlying soil thereby protecting tree roots and the rooting environment.

4.1.13. Temporary ground protection shall adhere to the following specification as advised in BS 5837 paragraph 6.2.3.4:

- For pedestrian movements only, a single thickness of scaffold boards placed either on top of a driven scaffold frame, so as to form a suspended walkway, or on top of a compression resistant layer (e.g., 100mm depth of woodchip) laid onto a geotextile membrane.
- For pedestrian-operated plant up to a gross weight of 2t, proprietary, inter-linked ground protection boards placed on top of a compression-resistant layer (e.g., 150 mm depth of woodchip), laid onto a geotextile membrane.
- For wheeled or tracked construction traffic exceeding 2t gross weight, an alternative system (e.g., proprietary systems or pre-cast reinforced concrete slabs) to an engineering specification designed in conjunction with arboricultural advice, to accommodate the likely loading to which it will be subject.

4.1.14. Temporary ground protection shall be installed as follows:

1. Where necessary, dismantle tree protection fencing and re-erect in a secondary location around the edge of the proposed ground protection.
2. Clear the area within which the ground protection is to be installed. Shrubs and other woody vegetation should be cut to ground level.
3. Install ground protection to the specification provided in paragraph 4.1.14. Obtain confirmation from the Project Arboriculturist that the ground protection is acceptable.
4. Ground protection shall be retained in-situ until all construction work is complete.

#### **CONSTRUCTION OF PROPOSED FOOTWAY / CYCLEWAY WITHIN AND ADJACENT TO RPAS**

4.1.15. All construction work shall comply with the following requirements:

- All work shall be subject to an agreed programme of arboricultural monitoring and supervision.
- No site preparation or construction activity shall take place until an appropriate AMS has been compiled and approved. Thereafter, all work shall be conducted in accordance with the AMS and shall not be varied without approval from the Project Arboriculturist and written consent from Vale of Glamorgan Council.

## APPENDIX A: TREE SURVEY METHODOLOGY

### METHODOLOGY

The tree survey was undertaken in accordance with the following methodology:

- Arboricultural features have been recorded as tree groups or wooded areas where this has been deemed appropriate. Tree groups and wooded areas have been recorded on the basis that they form distinct arboricultural features either aerodynamically, visually or because they contain trees of similar cultural and biodiversity value.
- The trees have been inspected using the Visual Tree Assessment methodology as developed by Mattheck and Breoler<sup>3</sup>.
- The tree survey was carried out from ground level only.
- No tissue samples were taken nor was any internal investigation of the subject trees undertaken.
- Tree heights and crown spreads have been estimated to the nearest 1m.
- Notes have been recorded where they relate to the quality of the arboricultural feature. Management recommendations have been provided where work is necessary for the abatement of a hazard which presents an unacceptable or intolerable level of risk to persons or property.
- Stem diameters have been measured in accordance with Annex C of BS 5837. Diameters of single stem trees on level ground have been measured at 1.5m above ground level. The combined stem diameters for multi-stemmed trees have been calculated in accordance with BS 5837 paragraph 4.6.1.
- By default, Root Protection Areas (RPAs) are calculated as an area equivalent to a circle with a radius 12 times the stem diameter and are capped at a distance of 15 metres.

### QUALITY ASSESSMENT

The quality of arboricultural features has been determined in accordance with BS 5837 Table 1, a summary of which is provided in **Table 1**. The purpose of the quality assessment is to enable informed decisions to be made regarding site layout, land use and design. The quality assigned to each survey item is recorded within **Appendix B: Arboricultural Survey Schedule**.

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<sup>3</sup> Mattheck, C., Breoler, H., 2006. *The body language of trees*. Norwich: The Stationary Office

**Table 3: BS 5837:2012 Table 1 – Cascade chart for tree quality assessment**

Category and definition	Criteria (including subcategories where appropriate)		
Trees unsuitable for retention			
<b>Category U</b> 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	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 decline 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		
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>
<b>Category A</b> <b>Trees of high quality</b> with an estimated remaining 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, or 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)
<b>Category B</b> <b>Trees of moderate quality</b> with an estimated remaining life expectancy of at least 40 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
<b>Category C</b> <b>Trees of low quality</b> with an estimated remaining life expectancy of at least 40 years	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

## LIMITATIONS

Arboricultural survey data is typically valid for a period of two years unless otherwise stated. Significant environmental events (such as extreme weather conditions) or changes to the Site may render it invalid within a shorter timescale.

The survey has only been undertaken from land within the client's ownership, from public land or from areas where formal access has been arranged.

The position of arboricultural features not recorded on a topographical survey has been estimated using aerial imagery.

Whilst arboricultural surveys are not seasonally limited it is the case that certain pests and diseases may be more or less evident at different times of the year. This is especially true of certain wood decaying fungi such as the Giant Polypore (*Meripilus giganteus*) where fruiting bodies are short-lived, and the early stages of root decay may not result in other identifiable symptoms. Walkover survey data is therefore based upon observations made at the time of the site visit and may be subject to change should further or more detailed inspections be undertaken.

### **Health and Safety**

This report in no way constitutes a health and safety survey. Where concerns for tree health and safety exist the necessary and appropriate tree inspections should be carried out.

Arboricultural survey data is of a preliminary nature and has been collected based on a walkover survey. Only defects visible from the ground have been noted and each individual feature may not have been inspected closely due to access difficulties, the presence of dense ivy or vegetation or safety constraints. Safety related features have recorded on the basis that the arboricultural features will be subject to a normal programme of tree hazard assessment and only those features which materially affect the quality of the feature or pose a real and immediate safety concern have been recorded.

### **Wildlife and Conservation**

Trees have the capacity to provide habitat for species such as bats, birds, and mammals some of which may be protected under UK or European Legislation. It is a statutory offence to injure, kill or disturb any protected species or to damage or destroy their breeding site or resting place. It is also an offence to disturb any nesting bird.

Wildlife and conservation matters are beyond the scope of this report although incidental comments may be made where these are of direct relevant to the arboricultural survey or subsequent assessments. It is advised that specialist ecological advice is sought prior to any tree removal or maintenance activities; these recommendations contained within this report should be reviewed in light of any ecological constraints which may be identified.

## APPENDIX B: TREE SURVEY SCHEDULE

Details of the surveyed trees are presented in **Table 2**; a key to the table is provided in **Table 3**.

The following tree numbers have been omitted from the tree survey schedule - 1-4, 8-17, 26-34, 37-41, 44-48, 50, 51, 56-62, 66-69, 71, 72, 77, 119, 122, 123, 125, 128, 130, 131, 139, 144, 149, 151, 153, 155, 156, 158, 159, 161, 163, 165-168, 171-173, 175, 185, 189, 193-196, 199, 201-207, 209-213, 218, 220-226, 229, 232, 235, 249, 253-257, 259-263, 266, 268, 276, 279, 281-285, 287, 289-294, 298, 300-302, 304-311, 313-334, 336-344, 347, 349-351, 355, 356, 363, 365, 368, 369, 371, 374, 375, 377, 378, 381, 385, 388, 389, 391-393, 395-398, 400-402, 404, 407-410, 412, 415, 418, 432, 433, 436, 438, 439 and 441-446. These numbers have been omitted as they apply to arboricultural features which were initially surveyed but which are now external to the arboricultural study area.

**Table 4: Tree survey schedule**

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
5	T	Salix sp. (willow)	5.0	-	-	190	-	-	6.0	6.0	1.0	M	10+	C	2	-	2.3
6	T	Salix sp. (willow)	5.0	-	-	367	-	-	6.0	6.0	1.0	M	10+	C	2	-	4.4
7	T	Fraxinus excelsior (common ash)	5.0	-	-	150	-	-	2.0	2.0	2.0	M	10+	C	2	-	1.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
18	T	Crataegus monogyna (common hawthorn)	3.0	-	-	220	-	-	2.0	2.0	0.0	M	10+	C	2	-	2.6
19	T	Crataegus monogyna (common hawthorn)	7.0	-	-	491	-	-	3.0	3.0	1.0	M	10+	C	2	-	5.9
20	T	Crataegus monogyna (common hawthorn)	6.0	-	-	477	-	-	4.0	4.0	2.0	M	10+	C	2	-	5.7
21	T	Acer sp. (maple)	10.0	-	-	500	-	-	3.0	3.0	2.0	M	10+	C	2	-	6.0
22	T	Crataegus monogyna (common hawthorn)	6.0	-	-	224	-	-	0.0	0.0	0.0	M	<10	U	2	-	2.7
23	T	Crataegus monogyna (common hawthorn)	4.0	-	-	367	-	-	3.0	3.0	1.0	M	10+	C	2	-	4.4
24	T	Fraxinus excelsior (common ash)	11.0	-	-	500	-	-	6.0	6.0	4.0	M	10+	C	2	-	6.0
25	T	Fraxinus excelsior (common ash)	12.0	-	-	532	-	-	6.0	6.0	5.0	M	10+	C	2	-	6.4



TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
35	T	Fraxinus excelsior (common ash)	10.0	-	-	350	-	-	5.0	5.0	2.0	M	10+	C	1	-	4.2
36	T	Fraxinus excelsior (common ash)	11.0	-	-	300	-	-	5.0	5.0	2.0	M	10+	C	1	-	3.6
42	T	Crataegus monogyna (common hawthorn)	8.0	-	-	150	-	-	2.0	2.0	1.0	M	10+	C	2	-	1.8
43	T	Salix sp. (willow)	9.0	-	-	300	-	-	4.0	4.0	2.0	M	10+	C	2	-	3.6
49	T	Acer pseudoplatanus (sycamore)	12.0	-	-	350	-	-	4.0	4.0	2.0	M	10+	C	2	-	4.2
52	T	Fraxinus excelsior (common ash)	14.0	-	-	532	-	-	7.0	7.0	2.0	M	10+	C	2	-	6.4
53	T	Fraxinus excelsior (common ash)	12.0	-	-	350	-	-	4.0	4.0	3.0	M	10+	C	2	-	4.2
54	T	Fraxinus excelsior (common ash)	13.0	-	-	280	-	-	5.0	5.0	3.0	M	10+	C	2	-	3.4

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
55	T	Fraxinus excelsior (common ash)	13.0	-	-	350	-	-	5.0	5.0	3.0	M	10+	C	2	-	4.2
63	T	Fraxinus excelsior (common ash)	5.0	-	-	217	-	-	2.0	2.0	1.0	EM	10+	C	2	-	2.6
64	T	Fraxinus excelsior (common ash)	11.0	-	-	400	-	-	5.0	5.0	2.0	M	10+	C	2	-	4.8
65	T	Quercus robur (English oak)	15.0	-	-	400	-	-	6.0	6.0	4.0	M	10+	C	1	Ivy covered dead wood at the top of the canopy	4.8
70	T	Quercus robur (English oak)	20.0	-	-	700	-	-	8.0	8.0	5.0	M	20+	B	1	-	8.4
73	T	Salix sp. (willow)	13.0	-	-	350	-	-	6.0	6.0	3.0	M	10+	C	2	-	4.2
74	T	Fraxinus excelsior (common ash)	7.0	-	-	283	-	-	3.0	3.0	3.0	EM	10+	C	2	-	3.4
75	T	Alnus glutinosa (common alder)	12.0	-	-	250	-	-	3.0	3.0	3.0	EM	10+	C	2	-	3.0

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
76	T	Alnus glutinosa (common alder)	12.0	-	-	250	-	-	3.0	3.0	3.0	EM	10+	C	2	-	3.0
78	T	Quercus robur (English oak)	16.0	-	-	800	-	-	11.0	11.0	3.0	M	20+	B	1	-	9.6
79	T	Quercus robur (English oak)	17.0	-	-	750	-	-	10.0	10.0	4.0	M	20+	B	1	-	9.0
80	T	Quercus robur (English oak)	18.0	-	-	650	-	-	11.0	11.0	7.0	M	10+	C	2	-	7.8
81	T	Acer campestre (field maple)	7.0	-	-	250	-	-	4.0	4.0	2.0	M	10+	C	2	-	3.0
82	T	Fagus sylvatica (common beech)	17.0	-	-	500	-	-	8.0	8.0	5.0	M	10+	C	1	-	6.0
83	T	Acer campestre (field maple)	8.0	-	-	250	-	-	4.0	4.0	2.0	EM	10+	C	1	-	3.0
84	T	Fraxinus excelsior (common ash)	17.0	-	-	400	-	-	6.0	6.0	6.0	M	10+	C	1	-	4.8
85	T	Acer campestre (field maple)	14.0	-	-	400	-	-	6.0	6.0	3.0	M	10+	C	2	-	4.8
86	T	Fraxinus excelsior (common ash)	16.0	-	-	450	-	-	7.0	7.0	4.0	M	10+	C	2	-	5.4
87	T	Fraxinus excelsior (common ash)	17.0	-	-	500	-	-	7.0	7.0	6.0	M	10+	C	1	-	6.0

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
88	T	Acer campestre (field maple)	14.0	-	-	400	-	-	5.0	5.0	3.0	M	10+	C	2	-	4.8
89	T	Fraxinus excelsior (common ash)	17.0	-	-	699	-	-	8.0	8.0	4.0	M	10+	C	2	-	8.4
90	T	Crataegus monogyna (common hawthorn)	5.0	-	-	300	-	-	2.0	2.0	1.0	M	10+	C	2	-	3.6
91	T	Fraxinus excelsior (common ash)	15.0	-	-	440	-	-	7.0	7.0	4.0	M	10+	C	2	-	5.3
92	T	Quercus robur (English oak)	17.0	-	-	500	-	-	10.0	10.0	6.0	M	20+	B	1	-	6.0
93	T	Tilia sp. (lime)	9.0	-	-	330	-	-	5.0	5.0	3.0	EM	10+	C	1	-	4.0
94	T	Salix caprea (goat willow)	15.0	-	-	745	-	-	7.0	7.0	4.0	M	10+	C	1	-	8.9
95	T	Tilia sp. (lime)	6.0	-	-	360	-	-	3.0	3.0	2.0	EM	10+	C	1	-	4.3
96	T	Pyrus sp. (pear)	8.0	-	-	240	-	-	2.0	2.0	2.0	SM	10+	C	1	-	2.9
97	T	Tilia sp. (lime)	6.0	-	-	310	-	-	3.0	3.0	2.0	EM	10+	C	1	-	3.7
98	T	Quercus robur (English oak)	17.0	-	-	500	-	-	6.0	6.0	7.0	M	10+	C	1	-	6.0
99	T	Tilia sp. (lime)	9.0	-	-	370	-	-	3.0	3.0	2.0	EM	10+	C	1	-	4.4
100	T	Tilia sp. (lime)	15.0	-	-	470	-	-	6.0	6.0	5.0	M	10+	C	1	-	5.6

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
101	T	Acer campestre (field maple)	10.0	-	-	390	-	-	4.0	4.0	2.0	EM	10+	C	1	-	4.7
102	T	Acer campestre (field maple)	10.0	-	-	390	-	-	4.0	4.0	2.0	EM	10+	C	1	-	4.7
103	T	Tilia sp. (lime)	12.0	-	-	430	-	-	4.0	4.0	6.0	EM	10+	C	1	-	5.2
104	T	Acer campestre (field maple)	14.0	-	-	470	-	-	6.0	6.0	2.0	M	10+	C	1	-	5.6
105	T	Tilia sp. (lime)	10.0	-	-	360	-	-	4.0	4.0	6.0	EM	10+	C	1	-	4.3
106	T	Unknown	4.0	-	-	280	-	-	2.0	2.0	2.0	SM	<10	U	1	-	3.4
107	T	Acer saccharinum (silver maple)	9.0	-	-	300	-	-	4.0	4.0	3.0	EM	10+	C	1	-	3.6
108	T	Unknown	4.0	-	-	240	-	-	2.0	2.0	2.0	SM	<10	U	1	-	2.9
109	T	Acer saccharinum (silver maple)	8.0	-	-	307	-	-	4.0	4.0	3.0	EM	10+	C	1	-	3.7
110	T	Acer saccharinum (silver maple)	11.0	-	-	410	-	-	5.0	5.0	3.0	EM	10+	C	1	-	4.9
111	T	Fraxinus excelsior (common ash)	19.0	-	-	688	-	-	11.0	11.0	4.0	M	20+	B	1	-	8.3
112	T	Tilia sp. (lime)	11.0	-	-	340	-	-	4.0	4.0	2.0	EM	10+	C	1	-	4.1

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
113	T	Acer saccharinum (silver maple)	11.0	-	-	390	-	-	4.0	4.0	3.0	EM	10+	C	1	-	4.7
114	T	Acer saccharinum (silver maple)	11.0	-	-	390	-	-	4.0	4.0	4.0	EM	10+	C	1	-	4.7
115	T	Tilia sp. (lime)	14.0	-	-	400	-	-	5.0	5.0	3.0	EM	10+	C	1	-	4.8
116	T	Quercus robur (English oak)	16.0	-	-	620	-	-	11.0	11.0	3.0	M	20+	B	1	-	7.4
117	T	Fraxinus excelsior (common ash)	16.0	-	-	410	-	-	8.0	8.0	5.0	M	10+	C	2	-	4.9
118	T	Acer saccharinum (silver maple)	12.0	-	-	440	-	-	5.0	5.0	4.0	EM	10+	C	1	-	5.3
120	T	Acer saccharinum (silver maple)	11.0	-	-	390	-	-	5.0	5.0	4.0	EM	10+	C	1	-	4.7
121	T	Fraxinus excelsior (common ash)	17.0	-	-	552	-	-	10.0	10.0	4.0	M	10+	C	2	-	6.6
124	T	Acer saccharinum (silver maple)	11.0	-	-	400	-	-	5.0	5.0	4.0	EM	10+	C	1	-	4.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
126	T	Acer saccharinum (silver maple)	13.0	-	-	450	-	-	5.0	5.0	3.0	EM	10+	C	1	-	5.4
127	T	Tilia sp. (lime)	7.0	-	-	344	-	-	4.0	4.0	2.0	EM	10+	C	1	-	4.1
129	T	Quercus robur (English oak)	16.0	-	-	610	-	-	6.0	6.0	4.0	M	20+	B	2	-	7.3
132	T	Quercus robur (English oak)	8.0	-	-	480	-	-	6.0	6.0	3.0	M	10+	C	2	Pollarded tree	5.8
133	T	Fraxinus excelsior (common ash)	14.0	-	-	490	-	-	3.0	3.0	6.0	M	10+	C	2	-	5.9
134	T	Fraxinus excelsior (common ash)	13.0	-	-	380	-	-	3.0	3.0	5.0	M	10+	C	2	-	4.6
135	T	Quercus robur (English oak)	16.0	-	-	600	-	-	10.0	10.0	4.0	M	20+	B	2	-	7.2
136	T	Fraxinus excelsior (common ash)	14.0	-	-	490	-	-	4.0	4.0	9.0	M	10+	C	2	-	5.9
137	T	Fraxinus excelsior (common ash)	15.0	-	-	500	-	-	6.0	6.0	9.0	M	10+	C	2	-	6.0
138	T	Fraxinus excelsior (common ash)	13.0	-	-	450	-	-	7.0	7.0	5.0	M	10+	C	2	-	5.4

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
140	T	Acer campestre (field maple)	9.0	-	-	439	-	-	5.0	5.0	2.0	EM	10+	C	2	-	5.3
141	T	Acer campestre (field maple)	11.0	-	-	677	-	-	5.0	5.0	2.0	EM	10+	C	2	-	8.1
142	T	Acer campestre (field maple)	12.0	-	-	674	-	-	6.0	6.0	2.0	M	10+	C	2	-	8.0
143	T	Quercus robur (English oak)	14.0	-	-	520	-	-	8.0	8.0	2.0	M	20+	B	2	-	6.2
145	T	Tilia sp. (lime)	9.0	-	-	280	-	-	4.0	4.0	1.0	SM	10+	C	2	-	3.4
146	T	Fraxinus excelsior (common ash)	14.0	-	-	490	-	-	6.0	6.0	3.0	M	10+	C	2	-	5.9
147	T	Quercus robur (English oak)	14.0	-	-	540	-	-	9.0	9.0	2.0	M	20+	B	2	-	6.5
148	T	Tilia sp. (lime)	11.0	-	-	280	-	-	3.0	3.0	1.0	SM	10+	C	2	-	3.4
150	T	Tilia sp. (lime)	11.0	-	-	410	-	-	4.0	4.0	1.0	M	10+	C	2	-	4.9
152	T	Crataegus monogyna (common hawthorn)	8.0	-	-	376	-	-	3.0	3.0	1.0	M	10+	C	2	-	4.5
154	T	Acer campestre (field maple)	11.0	-	-	450	-	-	6.0	6.0	2.0	M	10+	C	2	-	5.4
157	T	Tilia sp. (lime)	11.0	-	-	430	-	-	5.0	5.0	3.0	EM	20+	B	1	-	5.2
160	T	Tilia sp. (lime)	12.0	-	-	380	-	-	4.0	4.0	2.0	EM	20+	B	1	-	4.6



TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
162	T	Fraxinus excelsior (common ash)	15.0	-	-	547	-	-	6.0	6.0	5.0	M	10+	C	1	-	6.6
164	T	Tilia sp. (lime)	11.0	-	-	430	-	-	5.0	5.0	3.0	EM	20+	B	1	-	5.2
169	T	Tilia sp. (lime)	11.0	-	-	430	-	-	5.0	5.0	3.0	EM	20+	B	1	-	5.2
170	T	Acer campestre (field maple)	10.0	-	-	310	-	-	4.0	4.0	2.0	M	10+	C	2	-	3.7
174	T	Tilia sp. (lime)	11.0	-	-	430	-	-	5.0	5.0	3.0	EM	20+	B	1	-	5.2
176	T	Fraxinus excelsior (common ash)	16.0	-	-	510	-	-	7.0	7.0	2.0	M	10+	C	2	-	6.1
177	T	Tilia sp. (lime)	11.0	-	-	430	-	-	5.0	5.0	3.0	EM	20+	B	1	-	5.2
178	T	Quercus robur (English oak)	16.0	-	-	620	-	-	8.0	8.0	3.0	M	20+	B	1	-	7.4
179	T	Crataegus monogyna (common hawthorn)	2.0	-	-	150	-	-	1.0	1.0	2.0	SM	<10	U	1	Dead	1.8
180	T	Tilia sp. (lime)	11.0	-	-	430	-	-	5.0	5.0	3.0	EM	20+	B	1	-	5.2
181	T	Crataegus monogyna (common hawthorn)	2.0	-	-	149	-	-	2.0	2.0	1.0	Y	10+	C	2	-	1.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
182	T	Crataegus monogyna (common hawthorn)	2.0	-	-	228	-	-	1.0	1.0	-	SM	10+	C	2	-	2.7
183	T	Crataegus monogyna (common hawthorn)	4.0	-	-	368	-	-	6.0	6.0	1.0	EM	10+	C	2	-	4.4
184	T	Crataegus monogyna (common hawthorn)	9.0	-	-	492	-	-	5.0	5.0	3.0	EM	10+	C	2	-	5.9
186	T	Fraxinus excelsior (common ash)	10.0	-	-	434	-	-	7.0	7.0	2.0	M	10+	C	2	-	5.2
187	T	Crataegus monogyna (common hawthorn)	9.0	-	-	532	-	-	4.0	4.0	1.0	M	10+	C	2	-	6.4
188	T	Fraxinus excelsior (common ash)	10.0	-	-	500	-	-	6.0	6.0	2.0	M	10+	C	2	-	6.0
190	T	Fraxinus excelsior (common ash)	5.0	-	-	264	-	-	2.0	2.0	1.0	SM	10+	C	2	-	3.2
191	T	Acer pseudoplatanus (sycamore)	14.0	-	-	712	-	-	5.0	5.0	2.0	M	10+	C	1	-	8.5

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
192	T	Malus sp. (apple)	3.0	-	-	159	-	-	2.0	2.0	1.0	EM	<10	U	1	-	1.9
197	T	Acer campestre (field maple)	12.0	-	-	608	-	-	6.0	6.0	2.0	M	10+	C	1	-	7.3
198	T	Acer campestre (field maple)	11.0	-	-	390	-	-	5.0	5.0	2.0	M	10+	C	1	-	4.7
200	T	Acer campestre (field maple)	11.0	-	-	390	-	-	5.0	5.0	2.0	M	10+	C	1	-	4.7
208	T	Malus sp. (apple)	4.0	-	-	300	-	-	2.0	2.0	1.0	M	10+	C	1	-	3.6
214	T	Cupressus macrocarpa (Monterey cypress)	14.0	-	-	500	-	-	3.0	3.0	2.0	M	20+	B	1	-	6.0
215	T	Sorbus aucuparia (Rowan)	3.0	-	-	150	-	-	2.0	2.0	2.0	EM	10+	C	1	-	1.8
216	T	Sorbus aucuparia (Rowan)	4.0	-	-	180	-	-	2.0	2.0	2.0	EM	10+	C	1	-	2.2
217	T	Pittosporum tenifolium	6.0	-	-	324	-	-	2.0	2.0	1.0	EM	10+	C	1	-	3.9
219	T	Sorbus aucuparia (Rowan)	4.0	-	-	200	-	-	2.0	2.0	2.0	SM	10+	C	1	-	2.4
227	T	Sorbus aucuparia (Rowan)	5.0	-	-	210	-	-	2.0	2.0	2.0	E-	10+	C	1	-	2.5
228	T	Sorbus aucuparia (Rowan)	6.0	-	-	280	-	-	3.0	3.0	2.0	EM	10+	C	1	-	3.4

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
230	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	700	-	-	8.0	8.0	4.0	M	20+	B	1	-	8.4
231	T	Sorbus aucuparia (Rowan)	7.0	-	-	290	-	-	3.0	3.0	2.0	EM	10+	C	1	-	3.5
233	T	Cupressus sp. (cypress)	4.0	-	-	200	-	-	2.0	2.0	0.0	M	10+	C	1	-	2.4
234	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	700	-	-	8.0	8.0	4.0	M	20+	B	1	-	8.4
236	T	Sorbus aucuparia (Rowan)	6.0	-	-	370	-	-	3.0	3.0	2.0	M	10+	C	1	-	4.4
237	T	Prunus sp. (cherry)	7.0	-	-	390	-	-	4.0	4.0	2.0	M	20+	B	1	-	4.7
238	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	650	-	-	8.0	8.0	4.0	M	20+	B	1	-	7.8
239	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	650	-	-	8.0	8.0	4.0	M	20+	B	1	-	7.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
240	T	Acer sp. (maple)	4.0	-	-	250	-	-	2.0	2.0	1.5	EM	20+	B	1	-	3.0
241	T	Crataegus monogyna (common hawthorn)	5.0	-	-	474	-	-	2.0	2.0	0.0	M	10+	C	1	-	5.7
242	T	Phoenix canariensis (Canary palm)	3.0	-	-	207	-	-	1.0	1.0	1.0	SM	10+	C	1	-	2.5
243	T	Betula pendula (silver birch)	8.0	-	-	526	-	-	4.0	4.0	3.0	EM	10+	C	1	-	6.3
244	T	Cupressus sp. (cypress)	3.0	-	-	517	-	-	0.0	0.0	0.0	M	<10	U	1	Dead stems	6.2
245	T	Eucalyptus sp. (eucalyptus)	10.0	-	-	652	-	-	5.0	5.0	2.0	M	20+	B	1	-	7.8
246	T	Betula pendula (silver birch)	13.0	-	-	430	-	-	6.0	6.0	4.0	M	20+	B	1	-	5.2
247	T	Acer sp. (maple)	6.0	-	-	410	-	-	2.0	2.0	1.0	EM	10+	C	1	-	4.9
248	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	700	-	-	8.0	8.0	4.0	M	20+	B	1	-	8.4
250	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	16.0	-	-	650	-	-	8.0	8.0	4.0	M	20+	B	1	-	7.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
251	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	650	-	-	8.0	8.0	4.0	M	20+	B	1	-	7.8
252	T	Salix x sepulcralis 'Chrysocoma' (weeping willow)	19.0	-	-	650	-	-	8.0	8.0	4.0	M	20+	B	1	-	7.8
258	T	Prunus sp. (cherry)	6.0	-	-	300	-	-	2.0	2.0	1.0	M	10+	C	1	-	3.6
264	T	Prunus sp. (cherry)	5.0	-	-	250	-	-	3.0	3.0	1.0	EM	10+	C	1	-	3.0
265	T	Aesculus hippocastanum (horse chestnut)	8.0	-	-	380	-	-	2.0	2.0	2.0	EM	10+	C	1	-	4.6
267	T	Fraxinus excelsior (common ash)	8.0	-	-	523	-	-	6.0	6.0	2.0	M	10+	C	1	-	6.3
269	T	Fraxinus excelsior (common ash)	13.0	-	-	933	-	-	6.0	6.0	1.0	M	10+	C	1	-	11.2
270	T	Crataegus monogyna (common hawthorn)	5.0	-	-	280	-	-	3.0	3.0	1.0	EM	10+	C	1	-	3.4

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
271	T	Corylus avellana (common hazel)	3.0	-	-	145	-	-	3.0	3.0	0.0	Y	10+	C	1	-	1.7
272	T	Fraxinus excelsior (common ash)	16.0	-	-	895	-	-	8.0	8.0	1.0	M	10+	C	1	-	10.7
273	T	Acer campestre (field maple)	10.0	-	-	410	-	-	6.0	6.0	2.0	M	20+	B	1	-	4.9
274	T	Acer campestre (field maple)	8.0	-	-	350	-	-	5.0	5.0	1.0	M	10+	C	1	-	4.2
275	T	Acer campestre (field maple)	10.0	-	-	450	-	-	6.0	6.0	2.0	M	20+	B	1	-	5.4
277	T	Corylus avellana (common hazel)	10.0	-	-	831	-	-	6.0	6.0	1.0	M	20+	B	2	-	10.0
278	T	Corylus avellana (common hazel)	3.0	-	-	145	-	-	3.0	3.0	0.0	Y	10+	C	2	-	1.7
280	T	Acer pseudoplatanus (sycamore)	7.0	-	-	280	-	-	2.0	2.0	4.0	EM	10+	C	2	-	3.4
286	T	Salix sp. (willow)	14.0	-	-	400	-	-	5.0	5.0	1.0	M	10+	C	2	Obscured by Ivy cover and on private land	4.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
288	T	Corylus avellana (common hazel)	3.0	-	-	145	-	-	3.0	3.0	0.0	Y	10+	C	2	-	1.7
295	T	Corylus avellana (common hazel)	11.0	-	-	712	-	-	6.0	6.0	2.0	M	20+	B	2	-	8.5
296	T	Crataegus monogyna (common hawthorn)	8.0	-	-	625	-	-	3.0	3.0	1.0	M	10+	C	2	-	7.5
297	T	Acer pseudoplatanus (sycamore)	14.0	-	-	370	-	-	4.0	4.0	1.0	EM	10+	C	2	-	4.4
299	T	Fraxinus excelsior (common ash)	10.0	-	-	350	-	-	5.0	5.0	4.0	EM	10+	C	2	-	4.2
303	T	Fraxinus excelsior (common ash)	16.0	-	-	520	-	-	8.0	8.0	5.0	M	10+	C	2	-	6.2
312	T	Fraxinus excelsior (common ash)	16.0	-	-	724	-	-	6.0	6.0	4.0	M	10+	C	2	-	8.7



TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
335	W	Betula sp. (birch), Salix sp. (willow), Fraxinus excelsior (common ash)	-	5.0	14.0	-	75	300	3.0	1.0	1.0	M	10+	C	2	-	3.6
345	W	Crataegus monogyna (common hawthorn), Acer campestre (field maple), Fraxinus excelsior (common ash)	-	1.0	8.0	-	75	250	2.0	1.0	1.0	M	10+	C	2	-	3.0
346	W	Crataegus monogyna (common hawthorn), Acer campestre (field maple), Fraxinus excelsior (common ash)	-	1.0	8.0	-	75	250	2.0	1.0	1.0	M	10+	C	2	-	3.0

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
348	W	Crataegus monogyna (common hawthorn), Acer campestre (field maple), Fraxinus excelsior (common ash), Acer pseudoplatanus (sycamore)	-	1.0	5.0	-	75	200	2.0	1.0	1.0	M	10+	C	2	-	2.4
352	W	Alnus glutinosa (common alder), Acer campestre (field maple), Acer pseudoplatanus (sycamore), Crataegus monogyna (common hawthorn), Corylus avellana (common hazel)	-	1.0	10.0	-	75	300	3.0	1.0	1.0	M	20+	B	2	-	3.6

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
353	W	Acer pseudoplatanus (sycamore), Acer campestre (field maple), Fraxinus excelsior (common ash), Crataegus monogyna (common hawthorn), Alnus glutinosa (common alder)	-	1.0	10.0	-	75	350	3.0	1.0	1.0	M	20+	B	2	-	4.2
354	W	Acer pseudoplatanus (sycamore), Fraxinus excelsior (common ash), Alnus glutinosa (common alder), Aesculus hippocastanum (horse chestnut)	-	2.0	14.0	-	75	450	4.0	1.0	1.0	M	20+	B	2	-	5.4
357	W	Acer campestre (field maple), Crataegus monogyna (common hawthorn)	-	3.0	7.0	-	75	250	3.0	1.0	1.0	M	10+	C	2	-	3.0

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
358	G	Fraxinus excelsior (common ash), Acer pseudoplatanus (sycamore), Sambucus nigra (elder), Alnus glutinosa (common alder)	-	1.0	11.0	-	75	300	4.0	1.0	1.0	M	10+	C	2	-	3.6
359	W	Acer campestre (field maple), Fraxinus excelsior (common ash), Alnus glutinosa (common alder), Crataegus monogyna (common hawthorn), Quercus robur (English oak)	-	2.0	12.0	-	100	350	2.0	1.0	1.0	M	20+	B	2	Also includes sycamore and large portions of dense bramble	4.2
360	W	Acer campestre (field maple), Fraxinus excelsior (common ash), Quercus robur (English oak)	-	3.0	11.0	-	75	350	2.0	1.0	1.0	M	20+	B	2	-	4.2

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
361	W	Quercus robur (English oak), Acer campestre (field maple), Fraxinus excelsior (common ash)	-	2.0	15.0	-	75	650	5.0	2.0	2.0	M	20+	B	2	-	7.8
362	W	Quercus robur (English oak), Acer campestre (field maple), Crataegus monogyna (common hawthorn)	-	2.0	13.0	-	75	450	5.0	2.0	2.0	M	10+	C	2	-	5.4
364	W	Crataegus monogyna (common hawthorn), Acer campestre (field maple), Quercus robur (English oak)	-	3.0	8.0	-	75	300	4.0	1.0	1.0	M	10+	C	2	-	3.6
366	G	Prunus spinosa (blackthorn)Crataegus monogyna (common hawthorn)	-	2.0	5.0	-	70	200	2.0	1.0	1.0	EM	10+	C	2	-	2.4

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
367	W	Prunus spinosa (blackthorn)Crataegus monogyna (common hawthorn)Acer campestre (field maple)	-	2.0	5.0	-	70	180	2.0	1.0	1.0	EM	10+	C	2	-	2.2
370	W	Fraxinus excelsior (common ash)Acer pseudoplatanus (sycamore)Crataegus monogyna (common hawthorn)	-	2.0	13.0	-	75	400	4.0	1.0	1.0	M	10+	C	2	Group of many Ash and sycamore with hawthorn hedge below Partly TPO area	4.8
372	W	Corylus avellana (common hazel)	-	4.0	10.0	-	75	250	3.0	1.0	1.0	M	10+	C	2	-	3.0
373	G	Fraxinus excelsior (common ash)Salix sp. (willow)	-	1.0	4.0	-	75	150	1.0	1.0	1.0	EM	10+	C	2	-	1.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
376	H	Crataegus monogyna (common hawthorn)Acer campestre (field maple)Sambucus nigra (elder)	-	1.0	7.0	-	75	250	2.0	1.0	1.0	M	10+	C	2	-	3.0
379	H	Crataegus monogyna (common hawthorn)	-	4.0	6.0	-	150	400	3.0	0.0	1.0	M	10+	C	2	-	4.8
380	H	Crataegus monogyna (common hawthorn)Acer pseudoplatanus (sycamore)Fraxinus excelsior (common ash)Sambucus nigra (elder)	-	2.0	9.0	-	75	300	3.0	1.0	1.0	M	10+	C	2	-	3.6
382	G	Crataegus monogyna (common hawthorn)	-	1.0	3.0	-	75	150	2.0	0.0	1.0	M	10+	C	2	-	1.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
383	G	Fraxinus excelsior (common ash)Acer campestre (field maple)Crataegus monogyna (common hawthorn)Salix sp. (willow)	-	5.0	9.0	-	150	300	4.0	1.0	1.0	M	10+	C	2	-	3.6
384	G	Crataegus monogyna (common hawthorn)	-	2.0	4.0	-	75	150	2.0	0.0	0.0	M	10+	C	2	-	1.8
386	H	Crataegus monogyna (common hawthorn)Fraxinus excelsior (common ash)Acer campestre (field maple)	-	1.0	8.0	-	75	250	3.0	1.0	1.0	M	10+	C	2	-	3.0
387	H	Crataegus monogyna (common hawthorn)	-	2.0	4.0	-	75	150	2.0	0.0	0.0	M	10+	C	2	-	1.8
390	G	Crataegus monogyna (common hawthorn)	-	2.0	5.0	-	75	250	2.0	0.0	0.0	M	10+	C	2	-	3.0



TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
394	H	Crataegus monogyna (common hawthorn)Acer campestre (field maple)Acer pseudoplatanus (sycamore)Fraxinus excelsior (common ash)	-	1.0	8.0	-	75	250	2.0	1.0	1.0	M	10+	C	2	-	3.0
399	H	Crataegus monogyna (common hawthorn)Acer campestre (field maple)Acer pseudoplatanus (sycamore)Fraxinus excelsior (common ash)	-	1.0	8.0	-	75	250	2.0	1.0	1.0	M	10+	C	2	-	3.0

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
403	G	Crataegus monogyna (common hawthorn) Acer pseudoplatanus (sycamore) Ilex aquifolium (common holly)	-	1.0	3.0	-	75	100	2.0	0.0	0.0	EM	10+	C	2	-	1.2
405	G	Acer pseudoplatanus (sycamore) Sambucus nigra (elder)	-	1.0	8.0	-	75	200	2.0	1.0	1.0	EM	10+	C	2	-	2.4
406	H	Fagus sylvatica (common beech) Acer pseudoplatanus (sycamore)	-	1.0	9.0	-	75	180	2.0	1.0	1.0	EM	10+	C	2	-	2.2
411	H	Buxus sempervirens (box)	-	1.0	1.0	-	50	75	1.0	1.0	1.0	EM	10+	C	2	-	0.9
413	H	x Cupressocyparis leylandii (leylandii)	-	1.0	1.0	-	50	50	1.0	0.0	0.0	M	10+	C	2	-	0.9
414	H	Cupressus sp. (cypress)	-	1.0	3.0	-	50	100	1.0	0.0	0.0	EM	10+	C	2	-	1.1
416	H	Cupressus sp. (cypress)	-	3.0	4.0	-	75	200	2.0	0.0	0.0	M	10+	C	2	-	2.4

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
417	H	Pyracantha sp. (Firethorn)	-	3.0	4.0	-	70	100	2.0	0.0	0.0	M	10+	C	2	-	1.2
419	H	Cupressus sp. (cypress)	-	7.0	10.0	-	180	450	3.0	1.0	1.0	M	20+	B	1	-	5.4
420	H	Ligustrum oviofolium (privet)	-	1.0	1.0	-	50	50	1.0	0.0	0.0	EM	10+	C	2	-	0.9
421	H	Cupressus sp. (cypress)	-	4.0	4.0	-	70	170	2.0	0.0	1.0	M	10+	C	2	-	2.0
422	H	Cupressus macrocarpa (Monterey cypress)	-	10.0	12.0	-	300	500	4.0	1.0	1.0	M	20+	B	1	-	6.0
423	H	Cupressus sp. (cypress)	-	3.0	3.0	-	75	150	1.0	0.0	0.0	EM	10+	C	2	-	1.8
424	H	Cupressus sp. (cypress)	-	3.0	3.0	-	75	150	1.0	0.0	0.0	EM	10+	C	2	-	1.8
425	H	Cupressus sp. (cypress)	-	1.0	1.0	-	75	120	1.0	0.0	0.0	SM	10+	C	2	-	1.4
426	H	Cupressus sp. (cypress)	-	5.0	6.0	-	150	280	3.0	1.0	2.0	M	10+	C	2	-	3.4
427	H	Cupressus sp. (cypress)	-	5.0	7.0	-	150	250	2.0	2.0	2.0	M	10+	C	2	-	3.0
428	H	Cupressus sp. (cypress)	-	2.0	3.0	-	120	150	1.0	0.0	0.0	EM	10+	C	2	-	1.8
429	H	Cupressus sp. (cypress)	-	3.0	3.0	-	75	150	2.0	0.0	0.0	M	10+	C	2	-	1.8
430	H	Chamaecyparis lawsoniana (Lawson cypress)	-	2.0	2.0	-	70	150	1.0	0.0	0.0	EM	10+	C	2	-	1.8
431	H	Cupressus sp. (cypress)	-	3.0	3.0	-	75	150	2.0	0.0	0.0	M	10+	C	2	-	1.8

TREE NO	TYPE	SPECIES	HEIGHT (m)	MINIMUM HEIGHT (m)	MAXIMUM HEIGHT (m)	STEM DIAMETER (mm)	MINIMUM DIAMETER (mm)	MAXIMUM DIAMETER (mm)	MAXIMUM CROWN SPREAD (m)	LCH	LBH	AGE CLASS	ESTIMATED REMAINING CONTRIBUTION	CATEGORY	SUB-CATEGORY	NOTES	RPA RADIUS (m)
434	H	Buxus sempervirens (box)	-	3.0	3.0	-	70	100	1.0	0.0	0.0	EM	10+	C	2	-	1.2
435	H	Cupressus sp. (cypress)	-	2.0	3.0	-	70	120	1.0	0.0	0.0	EM	10+	C	2	-	1.4
437	G	Magnolia sp. (magnolia)	-	2.0	3.0	-	70	150	2.0	1.0	1.0	EM	10+	C	2	-	1.8
440	H	Cupressus sp. (cypress)	-	3.0	4.0	-	70	120	1.0	0.0	0.0	EM	10+	C	2	Private property estimates	1.4
447	W	Fraxinus excelsior (common ash), Acer pseudoplatanus (sycamore), Alnus glutinosa (common alder), Corylus avellana (common hazel), Crataegus monogyna (common hawthorn)	-	2.0	21.0	-	50	500	5.0	1.0	1.0	M	20+	B	2	-	6.0

*Table 5: Key and relevant descriptors*

Key:	Description:
Reference Nos	Individual reference number
Type:	<b>T</b> - tree; <b>G</b> - tree group; <b>W</b> - wooded area; <b>H</b> - hedge
Species:	Botanical name (common name); Only the most frequently occurring species within a tree group, wooded area or hedge are recorded
Height:	Overall height (m) – maximum and minimum heights are recorded for tree groups, wooded areas and hedges
DBH:	Stem diameter (mm) - calculated in accordance with BS 5837 paragraph 4.6.1. Maximum and minimum diameters are provided for tree groups, wooded areas, and hedges
Crown Spread:	Spread of crown(m) - based upon the maximum lateral dimension
LCH:	Lowest crown height (m); Where an arboricultural feature abuts the edge of the site then only the portion of the crown within, or overhanging the site has been assessed
LBH:	Height of lowest significant branch (m); Where an arboricultural feature abuts the edge of the site then only the portion of the crown within, or overhanging the site has been assessed
Life Stage:	<b>Y</b> - Young; <b>SM</b> - Semi-Mature; <b>EM</b> - Early Mature; <b>M</b> – Mature <b>Young:</b> recently planted and yet to fully establish; <b>Semi-Mature:</b> established but yet to attain mature stature (<25% life expectancy); <b>Early Mature:</b> Almost full height although crown still developing (<50% life expectancy); <b>Mature:</b> Full height and crown spread (>50% life expectancy)
Estimated Remaining Contribution:	Estimated life expectancy (under current site conditions) - <10 years, 10+ years, 20+ years, 40+ years
Category:	BS 5837 Category - <b>A</b> (high-quality) <b>B</b> (moderate-quality) <b>C</b> (low-quality) <b>U</b> (very-low quality/unsuitable for retention) Refer to <b>Table 1</b> for detailed descriptions
Sub-Category:	BS 5837 Sub-Category - the primary area of value - <b>1</b> ) Arboricultural <b>2</b> ) Visual <b>3</b> ) Cultural/Conservation
Notes:	General observations, particularly where relevant to the assigned BS 5837 category

<b>Key:</b>	<b>Description:</b>
<b>RPA Radius:</b>	Root Protection Area Radius (m). The radius of the circular Root Protection Area associated with the tree as measured from the centre of the stem. For tree groups, wooded areas and hedges the RPA radius is calculated using the maximum stem diameter.

## **APPENDIX C: TREE RETENTION / REMOVAL PLAN**







