



Boningale Homes

Albrighton South

Arboricultural Assessment

June 2024

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1.0 INTRODUCTION

- 1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Boningale Homes to present the findings of an Arboricultural Assessment and survey of trees located at land south of Albrighton (hereafter referred to as the site), OS Grid Ref SJ 808 034.

Site Description

- 1.2 The site is located south of Albrighton, consisting of land of agricultural usage. The site is bounded to the east by Newhouse Lane, to the north and west Cross Road and the A464 Holyhead road to the south. Patshull Road bisects the site from north to south,
- 1.3 Tree cover across the site was predominately located along field boundaries within hedgerows consisting of mature open grown specimens, typical of trees found within a site of agricultural usage.

Scope of Assessment

- 1.4 A tree survey and assessment of existing trees was carried out by FPCR Environment and Design on the 12th March 2024 in accordance with guidance contained within British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations' (hereafter referred to as BS5837).
- 1.5 This report has been produced to accompany an outline planning application for an urban extension containing residential areas, a Local Centre and secondary school with areas of green infrastructure.
- 1.6 The purpose of this report is therefore to firstly, present the results of this assessment of the existing trees' arboricultural value, based on their current condition and quality and to secondly, provide an assessment of impact arising from the proposed development of the site.

2.0 PLANNING POLICY

National Planning Policy Framework December 2023

- 2.1 National Planning Policy is defined by the National Planning Policy Framework (NPPF). This sets out the Government's most current and up to date planning policies for England and how these should be applied. The current NPPF is dated December 2023.
- 2.2 Paragraphs 10 and 11 of the NPPF state that there is a presumption in favour of sustainable development and states that for decision making, the LPA should be '*c) approving development proposals that accord with an up-to-date development plan without delay*'.
- 2.3 In relation to arboriculture, the NPPF states that:
- *136 'Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined (footnote 53), that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that*

appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users'. (footnote 53: unless, in specific cases, there are clear, justifiable and compelling reasons why this would be inappropriate)

- 186 (c) *'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons (footnote 67) and a suitable compensation strategy exists'.*

and provides specific guidance that:

- 186 (d) *'development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate'.*

- 2.4 With reference to paragraph 186 (c), examples of what is deemed to be *'wholly exceptional'* are included within Footnote 67 and provides the examples of *'infrastructure projects (including nationally significant infrastructure projects, orders under the Transport and Works Act and hybrid bills), where the public benefit would clearly outweigh the loss or deterioration of habitat'.*

3.0 SURVEY METHODOLOGY

- 3.1 The survey of trees has been carried out in accordance with the criteria set out in Chapter 4 of BS5837. The survey has been undertaken by a suitably qualified and experienced arboriculturist and has recorded information relating to all those trees within the site and those adjacent to the site which may be of influence to any proposals. Trees were assessed for their arboricultural quality and benefits within the context of the proposed development in a transparent, understandable, and systematic way.

- 3.2 Trees have been assessed as groups or hedgerows where it has been determined appropriate.

- The term group has been applied where trees form cohesive arboricultural features either aerodynamically, visually or culturally including biodiversity or habitat potential for example parkland or wood pasture.
- For the purposes of this assessment, a hedgerow is described as any boundary line of trees or shrubs less than 5m wide at the base and are managed under a regular pruning regime.
- For the purposes of this assessment woodland is described as a habitat where 'trees are the dominant plant form. The individual tree canopies generally overlap and interlink, often forming a more or less continuous canopy'¹. Woodlands however, are not just formed of trees and generally include a great variety of other plants. These will include 'mosses, ferns and lichens, as well as small flowering herbs, grasses and shrubs'².

¹ http://www.countrysideinfo.co.uk/woodland_manage/whatis.htm

² http://www.countrysideinfo.co.uk/woodland_manage/whatis.htm

- 3.3 An assessment of individual trees within groups and hedgerows has been made where a clear need to differentiate between them, for example, to highlight significant variation between attributes including physiological or structural condition or where a potential conflict may arise.

BS5837 Categories

- 3.4 Trees, groups and hedgerows have been divided into one of four categories based on Table 1 of BS5837, '*Cascade chart for tree quality assessment*'. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).
- 3.5 Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds.
- 3.6 Categories A, B and C are applied to trees that should be of material consideration in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.
- 3.7 **Category (U) – (Red):** Trees which are unsuitable for retention and are 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 within this category are:
- Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.
 - Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.
 - Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.
 - Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.
- 3.8 **Category (A) – (Green):** Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years with potential to make a lasting contribution. Such trees may comprise:
- Sub category (i) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
 - Sub category (ii) trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.
 - Sub category (iii) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.
- 3.9 **Category (B) – (Blue):** Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years with potential to make a significant contribution. Such trees may comprise:

- Sub category (i) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- Sub category (ii) 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.
- Sub category (iii) trees with material conservation or other cultural value.

3.10 **Category (C) – (Grey):** Trees that are considered for retention and are of low quality with an estimated remaining life expectancy of at least 10 years or young trees with a stem diameter below 150mm. Such trees may comprise:

- Sub category (i) unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories.
- Sub category (ii) trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value or trees offering low or only temporary / transient screening benefits.
- Sub category (iii) trees with no material conservation or other cultural value.

Ancient and Veteran Trees

3.11 Various published methodologies are currently available for the identification of Ancient and Veteran trees which, due to the complexity and subjectivity of the process of defining and assessing these trees, often have conflicting definitions.

3.12 This assessment and the criterion for defining a veteran tree is based upon the definition within BS:5837.

“Tree that, by recognized criteria, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned”.

NOTE These characteristics might typically include a large girth, signs of crown retrenchment and hollowing of the stem

3.13 Stem girth is the most reliable guide when determining the age of trees and in normal growing conditions, ancient and veteran trees are those which have a large girth by comparison with other trees of the same species. To inform the assessment of chronological age reference has been made to the chart provided within Lonsdale (2013) (shown below in Figure 1).

3.14 BS:5837 does not provide a definition for ancient trees and therefore the assessment and the criterion being used for identifying ancient tree is based upon government guidance on, *Ancient woodland, ancient trees and veteran trees: advice for making planning decisions*³ which states.

“All ancient trees are veteran trees, but not all veteran trees are ancient. The age at which a tree becomes ancient, or veteran will vary by species because each species ages at a different rate.”

3 Ancient woodland, ancient trees and veteran trees: advice for making planning decisions - GOV.UK (www.gov.uk)

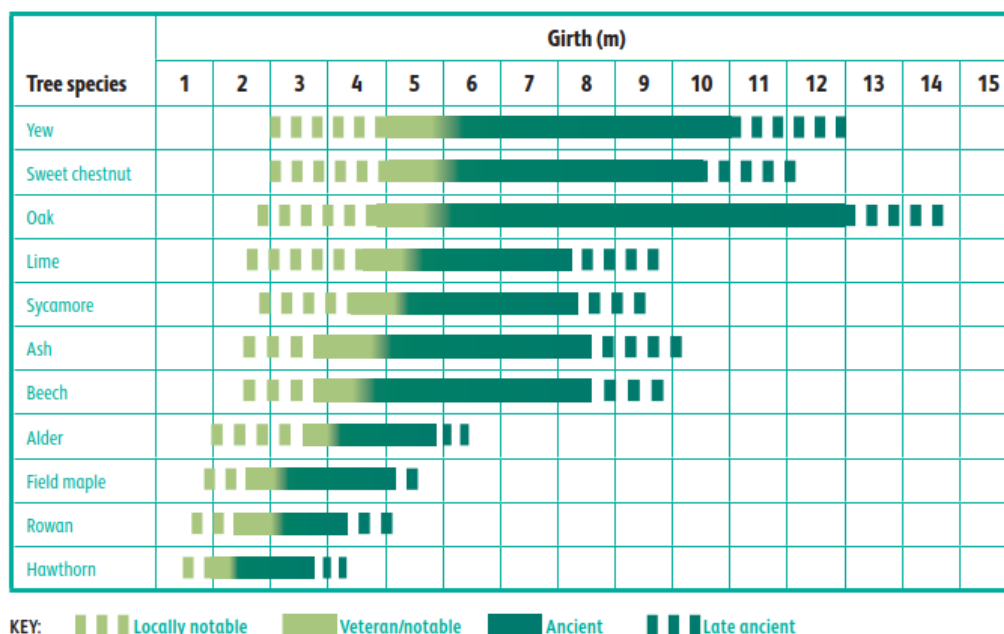


Figure 1: The chart of girth in relation to age and development classification of trees, as shown in Lonsdale (2013)⁴.

- 3.15 Ancient and veteran trees are also material considerations within the planning process and their importance is specifically recognised within the National Planning Policy Framework (NPPF) 2023, which includes its own definition of ancient and veteran trees:

‘A tree which, because of its age, size, and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage.’⁵

Considerations and Limitations of the Tree Survey

- 3.16 The survey was completed from ground level only and from within the boundary of the site. Aerial tree inspections or an assessment of the internal condition of the stem/s or branches were not undertaken at this stage as this level of survey is beyond the scope of the initial assessment.
- 3.17 The statements made in this report regarding the assessed applies to the date of survey and cannot be assumed to remain unchanged. It will be necessary to review all comments and observations made within this report, in accordance with sound arboricultural practice, within two years of the date of survey (unless explicitly stated elsewhere within this report). Further review may also be necessary where site conditions change or works to trees are carried out which have not been specified in detail within this report.
- 3.18 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The tree survey conducted, in accordance with BS5837, does not assess hedgerows against the Hedgerow Regulations 1997 or specifically from an ecological perspective, and is outside the scope of this assessment.

⁴ Lonsdale, D. (Ed.). 2013). Ancient and other veteran trees: further guidance on management. London: The Tree Council.

⁵ Ministry of Housing, Communities and Local Government. (2019). *National Planning Policy Framework*. London: Ministry of Housing, Communities and Local Government.

- 3.19 It may be necessary during detailed design to undertake further assessment and accurate positioning of woody species within tree groups and hedgerows to assist structural calculations for foundation design of structures in accordance with NHBC Chapter 4.2 Building near Trees.

4.0 RESULTS

- 4.1 A total of 78 individual trees, 21 groups of trees and 18 hedgerows were surveyed as part of the Arboricultural Assessment. Trees were surveyed as individual trees, groups and hedgerows as per the survey methodology.
- 4.2 Appendix A presents details of all individual trees, groups and hedgerows recorded during the assessment including heights, diameters at 1.5m from ground level, crown spread (given as a radial measurement from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention and the root protection area (RPA), calculated in accordance with Annex C, D and Section 4.6 of BS5837:2012.
- 4.3 General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.
- 4.4 The individual positions of trees, groups and hedgerows have been shown on the Tree Survey Plan. The positions of trees are based on a topographical / land survey, as far as possible, supplied by the client. Where topographical information has not identified the position of trees these have been plotted using a global positioning system and aerial photography to provide approximate locations. The crown spread, root protection area and shade pattern (where appropriate) are also indicated on this plan.

Results Summary

- 4.5 Tree stock recorded during the assessment was generally of native species including English oak *Quercus robur*, ash *Fraxinus excelsior*, common lime *Tilia x europaea*, hawthorn *Crataegus monogyna*. Trees ranged in quality from category A high value to C, low value with two trees being regarded as unsuitable for retention, category U. The majority of trees across the site were of a mature age class with the most abundant species being English oak.
- 4.6 Table 1 below summarises the trees assessed and several of the trees have been discussed in more detail following the table, owing to their physical condition or arboricultural significance.

Table 1: Summary of Trees by Retention Category

	Individual Trees	Total	Groups of Trees	Total
Category U - Unsuitable	T6, T31	2		0
Category A (High Quality / Value)	T3, T7, T12, T28, T29, T33, T51, T53, T54, T55, T56, T60, T61, T62, T63, T66, T67, T68, T70, T71, T72, T73, T74	23	G19	1
Category B (Moderate Quality / Value)	T1, T2, T10, T11, T13, T17, T18, T19, T20, T21, T24, T25, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T46, T50, T52, T57, T65, T69, T75, T76, T77, T78	33	G2, G7, G9, G10, G14, G15, G21	7
Category C (Low Quality / Value)	T4, T5, T8, T9, T14, T15, T16, T22, T23, T26, T27, T30, T32, T45, T47, T48, T49, T58, T59, T64	20	G1, G3, G4, G5, G6, G8, G11, G12, G13, G16, G17, G18, G20, H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, H17, H18	31

Category A Trees and Groups

- 4.7 Twenty three individual trees were recorded as being category A in terms of their arboricultural quality and value to the wider landscape. These were all English oak of mature stature with several specimens with stem girth over 1000mm. They housed characteristics typical of trees within an agricultural setting were noted including pruning to lower crowns to achieve sufficient ground clearance, deadwood within the crown and broken branches. The majority of these trees were located within field hedgerows with the exception of T3, T7, T12 and T67 which were standalone within field parcels.
- 4.8 One tree group, G19, was regarded as category A, located around a pond in between Newhouse Lane and Patshull Road. The group contained a mix of native species including mature English oak, hawthorn, blackthorn *Prunus spinosa*, crack willow *Salix fragilis* and wild cherry *Prunus avium* providing high landscape value to the area.

Category B Trees and Groups

- 4.9 Thirty-three individual trees and seven groups were recorded as category B.
- 4.10 Species observed included English oak, ash, sycamore *Aesculus hippocastanum*, wild cherry, holly *Ilex aquifolium*, common lime, and hybrid black polar *Populus x canadensis*. These were good quality trees which were only downgraded from category A due to either having an increased quantity of minor defects or being less prominent on the landscape.
- 4.11 T1 and T2 were of note for being located away from field boundaries. Both were mature English oak with notable features such as quantities of deadwood, crown retrenchment and branch

socket cavities. The condition of these trees is likely caused by close cultivation of the ground surrounding them.

- 4.12 A number of groups G7, G10, G14 and G21 formed mature linear boundary groups. A mix of native species was recorded within the groups, these were regarded as moderate quality category B due to the landscape value they provide.
- 4.13 G2 and G9 were tree groups located off site within residential gardens. These were recorded during the assessment due to their proximity to the site boundaries and for any conflicts that could arise.

Category C Trees and Groups

- 4.14 The remaining twenty trees and thirteen groups were regarded as low quality from an arboricultural perspective and thus graded category C. This is due to them either being unremarkable specimens or having unremedied defects.

Hedgerows

- 4.15 Eighteen hedgerows were recorded during the assessment, and all contained a mix of native species. These had been regularly maintained by flail to a height of 2-3 metres and regarded as category C in terms of their arboricultural value.

Ancient and Veteran Trees

- 4.16 None of the assessed trees were considered as ancient or veteran trees in accordance with our veteran survey methodology.

Statutory Considerations

- 4.17 Local authorities have a Duty under the Town and Country Planning Act to create Tree Preservation Orders (TPO) to protect and preserve specific trees and woodlands that bring significant amenity benefit to a particular site or location.
- 4.18 Under a TPO it is a criminal offence to cut down, top, lop, uproot or wilfully destroy a tree protected by that Order, or to cause or permit such actions, if carried out without the prior written consent of the acting LPA.
- 4.19 The presence of any Tree Preservation Orders that may affect the site has yet to be confirmed by Shropshire Council. Before any tree works are undertaken confirmation of the presence of the statutory constraints should be sought from the Local Planning Authority.
- 4.20 No direct consultation with the Local Planning Authority has taken place, however, it is understood having used the online search facility on the website for the Local Planning Authority, Shropshire Council that there are no Conservation Areas that would apply to any trees present on, or in close proximity to the assessment site and therefore no statutory constraints would apply to the development in respect of trees. Before any tree works are undertaken confirmation of the online information should be sought from the Local Authority.

- 4.21 Information provided on Tree Preservation Orders and Conservation Areas is accurate to the date of this assessment and cannot be assumed to remain unchanged. The last check was carried out on the 23rd May 2024.

5.0 ARBORICULTURAL IMPACT ASSESSMENT

- 5.1 The following paragraphs present a summary of the tree survey and discussion of particular trees and groups recorded in the context of any proposed development in the form of an Arboricultural Impact Assessment in accordance with section 5.4 of BS5837. Any final tree retentions will need to be reconciled with the advice contained within this report.
- 5.2 The AIA has been based upon the Illustrative Framework Plan and seeks to outline the relationship between the proposals and the existing trees and hedgerows. The drawing shows the proposals for urban extension containing residential areas, a Local Centre and secondary school with areas of green infrastructure.
- 5.3 An overlay of the layout has been incorporated in the Tree Retention Plan to assist in identifying the relationship and any potential conflicts between the proposals and the existing trees and hedgerows. The plan also identifies which trees would be required to be removed or retained as part of the proposed development.
- 5.4 Table 2 below summarises the impact on tree stock and these impacts have been discussed in more detail following the table.

Table 2: Summary of Impact on Tree Stock

	Trees to be Removed	Reason/s for removal
Category U - Unsuitable		
Category A (High Quality / Value)		
Category B (Moderate Quality / Value)	T75	T75 shown as removed to facilitate road layout across Newhouse Lane
Category C (Low Quality / Value)	H1, H2, H5, H11, H15, H12	Openings in hedgerows are shown to be removed to facilitate access and main internal road layout.

- 5.5 Through good design, and by virtue of the existing tree cover largely being confined to the field boundaries, the proposals would see much of the existing tree cover retained within areas of new public open space and landscape buffers as part of the overall Green Infrastructure illustrated around the proposed housing areas. New tree planting has also been illustrated within these areas of green space, and the development proposals should therefore be considered as positive from an arboricultural perspective, requiring very little tree removal to facilitate construction of the new housing areas.
- 5.6 Losses across the site are limited to sections of H1, H2, H5, H11, H12 and, H15 to allow access and internal road layout. Hedgerows were regarded as category C in terms of their arboricultural value.

- 5.7 One individual tree, T75, is shown as removed to facilitate the proposed road crossing Newhouse Lane. T75 was a mature English oak recorded as moderate quality, category B.
- 5.8 T1 and T67 are within development parcels although shown as retained within the layout. At a detailed design stage, these trees must be provided with an adequate buffer.
- 5.9 After appraising the proposals for arboricultural implications, it can be stated that the impacts upon the existing tree stock is minimal and by developing this parcel of land there is opportunity to increase the overall canopy cover and arboricultural value of the site.

6.0 NEW TREE AND HEDGEROW PLANTING

- 6.1 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions.
- 6.2 Wherever possible, following discussions with the developer and utility companies, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.
- 6.3 Tree planting should be avoided where they may obstruct overhead power lines or cables. Any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.
- 6.4 As part of the subsequent reserved matters application, should the application be approved, an adequate quantity of structured tree planting should be provided to mitigate for any tree removal necessary to implement the development. The purpose and function of this new tree planting should be understood from the start of any design stages so that key objectives from a landscape perspective can also be achieved.
- 6.5 The landscaping scheme should consider the use of both native tree species (for their low maintenance requirements and nature conservation value) and ornamental species (for their contribution to urban design and amenity value). Species choices should be selected on the basis of their suitability for the final site use. Furthermore, during the design process consultation should be made with the Local Planning Authority to obtain information on their tree strategy and incorporate the planting proposals with any local policies and initiatives and/or Biodiversity Action Plans (BAP).
- 6.6 When deciding upon suitable tree species, careful consideration would need to be given to the following: ultimate height and canopy spread, form, habit, density of crown, potential shading effect, colour, water demand, soil type and maintenance requirements in relation to both the built form of the new development and existing properties.
- 6.7 Through careful species selection, the landscape scheme shall reduce the risk of trees being removed in the future on the grounds of nuisance. Nuisance can be perceived in a number of ways and vary from person to person however most commonly, within the context of trees, low overhanging branches, excessive shading, seasonal leaf fall and the misinformed perception that trees close to buildings cause damage.

- 6.8 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. Consequently, it is important that the proposed scheme delivers a net gain in terms of linear hedgerows through new planting to compensate for any losses. Species should be native, and characteristic of the locality.

Rooting Environment and Soil Volumes

- 6.9 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions. Healthy mature trees integrate well into the built environment; increase the maturity of the landscape; help provide a natural green and leafy urban environment in which people would want to reside whilst also benefiting local wildlife.
- 6.10 The planting of trees within confined urban environments should consider the use of appropriately designed planting pits specifically engineered to promote tree health and longevity. Crucially the aim will be to provide an adequate volume of quality soil for roots to suitably develop by calculating the amount of available soil volumes needed and selecting species whose mature size is compatible with the site. This is an integral component of the planning stage (Lindsey & Bassuk, 1991).

General Planting Recommendations

- 6.11 Wherever possible, following discussions with the developer and utility companies, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.
- 6.12 Tree planting should be avoided where they may obstruct overhead power lines or cables. Any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

7.0 TREE PROTECTION MEASURES

- 7.1 Retained trees should be adequately protected during works through the erection of the requisite tree protection measures. These protection measures should be detailed as part of a site-specific Arboricultural Method Statement, which could be imposed as a condition of planning approval.
- 7.2 Measures to protect trees should follow the guidance in BS5837 and be applied where necessary for the purpose of protecting trees within the site whilst allowing sufficient access for the implementation of the proposed layout. These have been broadly summarised below.

General Information and Recommendations

- 7.3 All trees retained on site should be protected by suitable barriers or ground protection measures around the calculated RPA, crown spread of the tree or other defined constraints of this assessment as detailed by section 6 and 7 of BS5837.

- 7.4 Barriers should be erected prior to commencement of any construction work and once installed, the area protected by fencing or other barriers will be regarded as a construction exclusion zone.
- 7.5 Any trees that are not to be retained as part of the proposals should be felled prior to the erection of protective barriers. Particular attention needs to be given by site contractors to minimise damage or disturbance to retained specimens.
- 7.6 Construction access may take place within the root protection area if suitable ground protection measures are in place. This may comprise single scaffold boards over a compressible layer laid onto a geo-textile membrane for pedestrian movements. Vehicular movements over the root protection area will require the calculation of expected loading and the use of proprietary protection systems.

Tree Protection Barriers

- 7.7 Tree protection fencing should be fit for the purpose of excluding any type of construction activity and suitable for the degree and proximity of works to retained trees. Barriers must be maintained to ensure that they remain rigid and complete for the duration of construction activities on site.
- 7.8 In most situations, fencing should comprise typical construction fencing panels attached to scaffold poles driven vertically into the ground, as illustrated in Appendix B.
- 7.9 Where site circumstances and the risk to retained trees do not necessitate the default level of protection an alternative will be specified appropriate to the level / nature of anticipated construction activity.

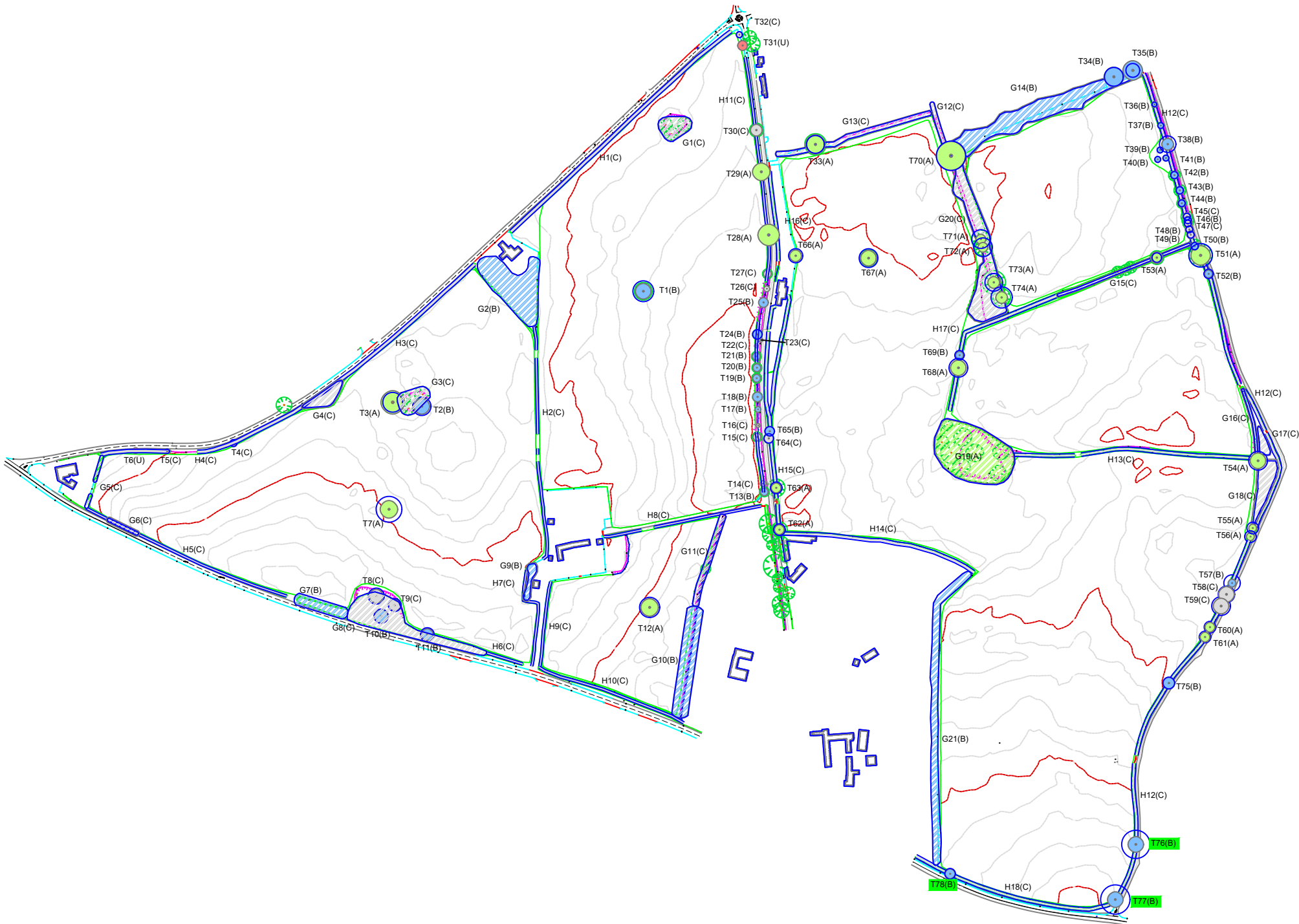
Protection outside the exclusion zone

- 7.10 Once the areas around trees have been protected by the barriers, any works on the remaining site area may be commenced providing activities do not impinge on protected areas.
- 7.11 All weather notices should be attached to the protective fencing to indicate that construction activities are not permitted within the fenced area. The area within the protective barriers will then remain a construction exclusion zone throughout the duration of the construction phase of the proposed development.
- 7.12 Wide or tall loads etc should not come into contact with retained trees. Banksman should supervise transit of vehicles where they are near retained trees.
- 7.13 Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree stem. No concrete should be mixed within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.
- 7.14 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.
- 7.15 Any trees which need to be felled adjacent to or are present within a continuous canopy of retained trees, must be removed with due care (it may be necessary to remove such trees in sections).

8.0 TREE MANAGEMENT

- 8.1 All retained trees should be subjected to sound arboricultural management as recommended within section 8.8.3 of BS5837 *Post Development Management of Existing Trees*, where there is a potential for public access to satisfy the landowner's duty of care.
- 8.2 Landowners responsible for trees, especially those within the public domain, have a legal 'duty of care' to ensure that visitors and neighbours of their land are reasonably safe and that nobody comes to harm or injury, by his or her negligence, through taking measures to reduce risks as far as is 'reasonably practical' (The Health and Safety at Work Act 1974).
- 8.3 To ensure that risks are reduced as far as is 'reasonably practicable' it will be necessary that, a review of the relationship between retained trees and the new development should be undertaken by a qualified arboriculturist to assess the retained tree cover and prepare a schedule of tree works.
- 8.4 The Occupiers Liability Act (1957 and 1984) also places a 'duty of care' to ensure that no reasonably foreseeable harm takes place due to tree defects. That duty of care should be reasonable, proportionate, and reasonably practicable when managing the risk⁶.
- 8.5 It is currently expected that a suitably qualified Arboriculturist or tree surveyor should inspect trees with an appropriate level of regularity. The purpose of the inspections is to determine whether a tree could foreseeably cause harm by virtue of its size and physical condition.
- 8.6 All tree works undertaken should comply with British Standard 3998:2010 and should therefore be carried out by skilled tree surgeons. It would be recommended that quotations for such work be obtained from Arboricultural Association Approved Contractors as this is the recognised authority for certification of tree work contractors.
- 8.7 All vegetation and, particularly, woody vegetation proposed for clearance should be removed outside of the bird-breeding season (March - September inclusive) as all birds are protected under the Wildlife and Countryside Act, 1981 (as amended) whilst on the nest. Where this is not possible, vegetation should be checked for the presence of nesting birds prior to removal by an experienced ecologist.

⁶ The Health and Safety at Work Act 1974



KEY

Category U - Trees / Groups Unsuitable for Retention
(BS 5837:2012)

Category A - Trees / Groups of High Quality
(BS 5837:2012)

Category B - Trees / Groups of Moderate Quality
(BS 5837:2012)

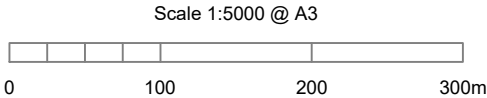
Category C - Trees / Groups of Low Quality
(BS 5837:2012)

Hedgerow
(Colour indicates BS5837:2012 Category)

Root Protection Area (The RPA has been altered
where appropriate to reflect underground constraints)

T1/G1
Tree / Group Positioned by Topographical Survey
Tree / Group Positioned by Aerial Imagery

Indicative Shade Pattern (in accordance with
BS5837:2012 where appropriate)



NOTES

All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with project Arboriculturalist. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.

Drawing has been produced in colour and is based on digital information in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.

Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the project Arboriculturalist should works commence 12 months after the date of this survey.

SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

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-	29.04.2024	First Issue	Initial
rev	date	description	by

masterplanning

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landscape design

urban design

ecology

architecture

arboriculture

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client

Boningale Homes

project

Albrighton South

drawing title

TREE SURVEY PLAN

scale

1:5000 @ A3

drawn/checked

RG

date

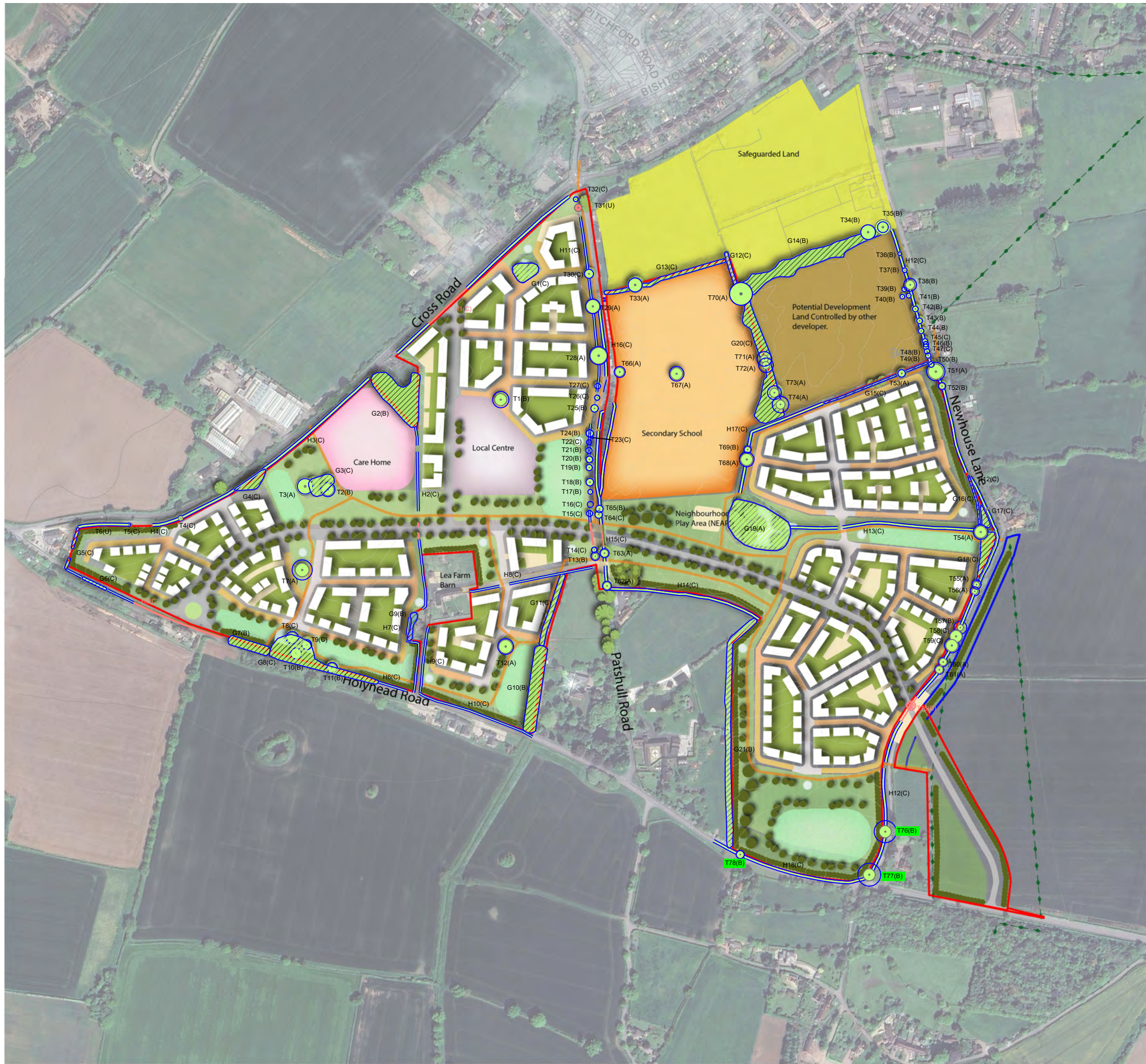
April 2024

drawing number

12322-T-01

rev

-



KEY

-  Tree/Group to be Retained
-  Tree/Group proposed to be removed subject to relevant permissions
-  Category U - Unsuitable for retention on arboricultural grounds
-  Hedgerow Proposed to be Retained and Incorporated into the New Development
-  Hedgerow proposed to be removed subject to relevant permissions
-  Root Protection Area (Shown for retained trees only)
-  T1/G1 Tree / Group Positioned by Topographical Survey
T1/G1 Tree / Group Positioned by Aerial Imagery
-  T1 (A) Individual / Group Number to be Removed and BS 5837:2012 Category

Scale 1:5000 @ A3



NOTES

All dimensions to be verified on site. Do not scale this drawing, use figured dimensions only. All discrepancies to be clarified with project Arboriculturalist. Drawing to be read in conjunction with Arboricultural Assessment and Appendix A - Tree Schedule.

Drawing has been produced in colour and is based on digital information in .dwg format, aerial images and/or GPS location where appropriate. A monochrome copy should not be relied upon. The exact position of individual trees or species included as part of a tree group, woodland or hedgerow should be checked and verified on site prior to any decisions for foundation design, tree operations or construction activity being undertaken. Further survey work would be required for calculating foundation depths.

Trees are living organisms that change over time, the condition of all trees illustrated herein, are to be checked by the project Arboriculturalist should works commence 12 months after the date of this survey.

SOME TREES MAY BE SUBJECT TO STATUTORY CONSTRAINTS. IT IS THEREFORE ADVISED THAT NO WORKS SHOULD BE UNDERTAKEN TO ANY TREES ILLUSTRATED HEREIN WITHOUT FIRST OBTAINING THE RELEVANT AUTHORISATION TO DO SO UNLESS AGREED AS PER THE APPROVED PLANS THROUGH PLANNING CONSENT.

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-	10.05.2024	First Issue	RG
A	23.05.2024	Update Masterplan	RG
rev	date	description	by



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client
Boningale Homes

project
Albrighton South

drawing title
TREE RETENTION PLAN

scale
1:5000 @ A3

drawn/checked
RG/AW

date
May 2024

drawing number
12322-T-02

rev
A

CAD file: L:\12300\12322\ARB\AA\Plans\Tree Retention Plan.dwg

Appendix A - Tree Schedule

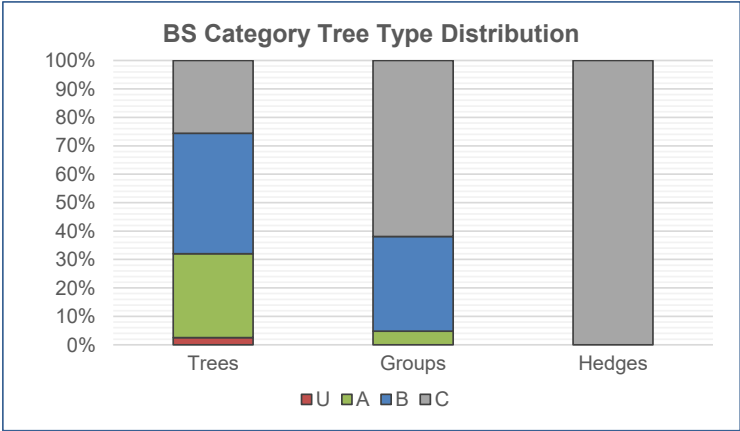
Measurements	Age Classes	Quality Assessment of BS Category	ULE (relates to BS Category)
Height - Measured using a digital laser clinometer (m)	YNG: Establishing, typically with good vigour and fast growth rates and strong apical dominance; c. less than 1/3 life expectancy	Category U - Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.	<10 years
Stem Dia. - Diameter measured (mm) in accordance with Annex C of the BS5837	SM: Semi-mature trees less than 1/3 life expectancy	Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years.	40+ years
Crown Radius - Measured using a digital laser clinometer radially from the main stem (m)	EM: Established, typically vigorous and increasing in apical height and lateral spread; 1/3 - 2/3 life expectancy. Offers landscape significance	Category B - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.	20-40 years
Abbreviations est - Estimated stem diameter avg - Average stem diameter for multiple stems upto - Maximum stem diameter of a group	M: Fully established over 2/3 life expectancy, generally good vigour and achieving full height potential with crown still spreading	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.	10-20 years
	OM: Fully mature, at the extremes of expected life expectancy, vigour decreasing, declining or moribund	Sub-categories: (i) - Mainly arboricultural value (ii) - Mainly landscape value (iii) - Mainly cultural or conservation value	
	V: biological, cultural or aesthetic value comprising niche saproxylic habitat. Individuals of large proportions (stem girth) in comparison to trees of the same species/surviving beyond the typical age range for their species.	The BS category particular consideration has been given to the following: • The presence of any structural defects in each tree/group and its future life expectancy • The size and form of each tree/group and its suitability within the context of a proposed development • The location of each tree relative to existing site features e.g. its screening value or landscape features • Age class and life expectancy	

Structural Condition	Physiological Condition	Root Protection Area (RPA)
Good - No significant structural defects	Good - No significant health problems	• The RPA Radius column provides the extent of an equivalent circle from the centre of the stem (m). • The RPA is calculated using the formulae described in paragraph 4.6.1 of British Standard 5837: 2012 and is indicative of the rooting area required for a tree to be successfully retained. Tree roots extend beyond the calculated RPA in many cases and where possible a greater distance should be protected. • Where veteran trees have been identified the RPA has been calculated in accordance with Natural England guidance i.e. 15x the stem diameter, uncapped.
Fair - Structural defects that can be remediated	Fair - Symptoms of ill-health that can be remediated	
Poor - Significant defects beyond remediation, present a risk of failure in the foreseeable future	Poor - Significant ill-health. Unlikely the tree will recover in the long term	
Dead - Dead tree with structural integrity of tree severely compromised	Advanced Decline / Dead - Advanced state of decline and unlikely to recover or Dead	

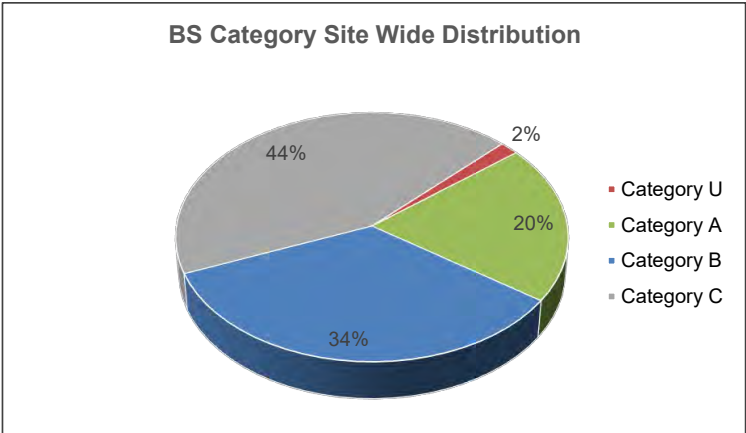
Appendix Summary

	Individual Trees	Totals	Tree Groups and Hedgerows	Totals
Category U	T6, T31	2		0
Category A	T3, T7, T12, T28, T29, T33, T51, T53, T54, T55, T56, T60, T61, T62, T63, T66, T67, T68, T70, T71, T72, T73, T74	23	G19	1
Category B	T1, T2, T10, T11, T13, T17, T18, T19, T20, T21, T24, T25, T34, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T46, T50, T52, T57, T65, T69, T75, T76, T77, T78	33	G2, G7, G9, G10, G14, G15, G21	7
Category C	T4, T5, T8, T9, T14, T15, T16, T22, T23, T26, T27, T30, T32, T45, T47, T48, T49, T58, T59, T64	20	G1, G3, G4, G5, G6, G8, G11, G12, G13, G16, G17, G18, G20, H1, H2, H3, H4, H5, H6, H7, H8, H9, H10, H11, H12, H13, H14, H15, H16, H17, H18	31
	Total	78	Total	39

BS Category Tree Type Distribution displays the proportion of trees assessed in each type to enable a better understanding of the category distribution.



BS Category Site Wide Distribution shows the proportion of trees assessed in each category across the whole site which allows an interpretation of the site's overall quality.



Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
INDIVIDUAL TREES										
T1	English Oak Quercus robur	15	880	8	M	P / F	Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Storm damage present Burrows at base crown retrenchment evident	350	10.6	B (i)
T2	English Oak Quercus robur	14	780	8	M	F	Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Minor dead wood evident in the crown (<75mm) Burrows at base crown retrenchment evident	275	9.4	B (i)
T3	English Oak Quercus robur	14	840	12	M	G	Branch socket cavities observed Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Minor dead wood evident in the crown (<75mm) No major defects were noted Burrows at base crown retrenchment evident	319	10.1	A (i)
T4	Crab Apple Malus sylvestris	5	Over ivy 310	3	SM	F	Branch stubs evident Close cultivation of the soil Dense ivy cover on main stem Overhead cables	43	3.7	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T5	English Oak Quercus robur	6	est 180	N - 1 S - 1 E - 4 W - 1	SM	P	Outgrown from managed hedgerow and growing around telegraph pole	15	2.2	C (i)
T6	English Elm Ulmus procera	8	220	3	SM	D	Dense ivy cover and no live growth visible next to telegraph pole	N/A	N/A	U
T7	English Oak Quercus robur	18	est 1100	9	M	P / F	Branch socket cavities observed Branch stubs evident Broken branches evident Close cultivation of the soil Dieback of the crown observed Epicormic growth evident within the crown Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Potential Roost Features (PRF) Rabbit burrows at base	547	13.2	A (i)
T8	English Oak Quercus robur	13	est 680	7	M	P	Set within group on edge of pond lift of root plate evident limited future potential	209	8.2	C (i)
T9	English Oak Quercus robur	14	550	6	M	P	Branch stubs evident Broken branches evident Delaminating bark on main stem Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Set within group on edge of pond	137	6.6	C (i)
T10	English Oak Quercus robur	14	est 600	7	M	F	Branch stubs evident Broken branches evident Characteristic for species Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Set within group on edge of pond	163	7.2	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T11	English Oak Quercus robur	11	Over ivy 580	6	M	F	Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm)	152	7.0	B (i)
T12	English Oak Quercus robur	16	860	9	M	F	Branch stubs evident Broken branches evident Characteristic for species Close cultivation of the soil Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Pruning wounds noted Storm damage present	335	10.3	A (i)
T13	English Oak Quercus robur	11	Over ivy 470	4	EM	F	Minor dead wood evident in the crown (<75mm) No major defects were noted	100	5.6	B (i)
T14	Ash Fraxinus excelsior	11	est 300	3	EM	F	Base obscured Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm) No major defects were noted	41	3.6	C (i)
T15	Sycamore Acer pseudoplatanus	11	est 330	4	EM	F	Characteristic for species Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm) No major defects were noted	49	4.0	C (i)
T16	Holly Ilex aquifolium	11	est 330	2	EM	F	Characteristic for species Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm) No major defects were noted	49	4.0	C (i)
T17	English Oak Quercus robur	9	est 260	3	EM	F	Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted	31	3.1	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T18	Horse Chestnut Aesculus hippocastanum	13	est 410	5	EM	F	Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm) No major defects were noted	76	4.9	B (i)
T19	English Oak Quercus robur	10	est 340	4	EM	F	Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted	52	4.1	B (i)
T20	Common Lime Tilia x europaea	10	est 300 220	4	EM	F	Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted	63	4.5	B (i)
T21	Sycamore Acer pseudoplatanus	11	est 330	4	EM	F	Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted	49	4.0	B (i)
T22	Hawthorn Crataegus monogyna	5	260 120	2	EM	F	Dense ivy cover on main stem East side of ditch	37	3.4	C (ii)
T23	Hawthorn Crataegus monogyna	4	120	2	EM	P	East side of ditch	7	1.4	C (ii)
T24	English Oak Quercus robur	9	est 400	5	EM	F	Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted	72	4.8	B (i)
T25	Wild Cherry Prunus avium	9	400	5	M	F	Low crown form Minor dead wood evident in the crown (<75mm) No major defects were noted	72	4.8	B (ii)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T26	Hybrid Black Poplar <i>Populus x canadensis</i>	8	280	3	SM	P	Branch stubs evident Broken branches evident Close cultivation of the soil Dense ivy cover on main stem	35	3.4	C (i)
T27	Silver Birch <i>Betula pendula</i>	12	300	4	SM	F	Branch stubs evident Characteristic for species Minor dead wood evident in the crown (<75mm) No major defects were noted	41	3.6	C (i)
T28	English Oak <i>Quercus robur</i>	18	980	11	M	F	Branch stubs evident Broken branches evident Close cultivation of the soil Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Typical crown form	434	11.8	A (i)
T29	English Oak <i>Quercus robur</i>	16	Over ivy 800	9	M	F	Branch stubs evident Broken branches evident Close cultivation of the soil Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Typical crown form	290	9.6	A (i)
T30	Ash <i>Fraxinus excelsior</i>	12	est 6x 200	6	M	P	Basal suckers present Branch stubs evident Broken branches evident Characteristic for species Dense ivy cover on main stem Included bark union Minor dead wood evident in the crown (<75mm)	109	5.9	C (i)
T31	Sycamore <i>Acer pseudoplatanus</i>	6	400	5	EM	P	Topped for overhead utilities at 3m	N/A	N/A	U
T32	Common Lime <i>Tilia x europaea</i>	5	180 180	3	Yng	P	Included union at 1m from ground level	29	3.1	C (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T33	English Oak Quercus robur	20	est 750	10	M	G	Typical and characteristic form No obvious major defects	254	9.0	A (i)
T34	Ash Fraxinus excelsior	21	est 800	10	M	F	Typical and characteristic form Ditch at base	290	9.6	B (i)
T35	Ash Fraxinus excelsior	21	est 500 300	10	M	F	Typical and characteristic form Ditch at base	154	7.0	B (i)
T36	English Oak Quercus robur	6	est 200	3	EM	F	Typical and characteristic form Ditch at base	18	2.4	B (i)
T37	English Oak Quercus robur	6	est 250	3	EM	F	Typical and characteristic form Ditch at base	28	3.0	B (i)
T38	English Oak Quercus robur	15	est 700	6	M	F	Typical and characteristic form Epicormic regrowth	222	8.4	B (i)
T39	English Oak Quercus robur	6	est 250	3	EM	F	Typical and characteristic form Self set	28	3.0	B (i)
T40	English Oak Quercus robur	6	est 250	3	EM	F	Typical and characteristic form Self set	28	3.0	B (i)
T41	English Oak Quercus robur	6	est 250	3	EM	F	Typical and characteristic form Self set	28	3.0	B (i)
T42	English Oak Quercus robur	10	est 300	4	EM	F	Typical and characteristic form Self set	41	3.6	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T43	English Oak <i>Quercus robur</i>	10	est 300	4	EM	F	Typical and characteristic form Self set	41	3.6	B (i)
T44	English Oak <i>Quercus robur</i>	10	est 280	4	EM	F	Typical and characteristic form Self set	35	3.4	B (i)
T45	Holly <i>Ilex aquifolium</i>	10	est 280	4	M	F	Typical and characteristic form Self set	35	3.4	C (i)
T46	Holly <i>Ilex aquifolium</i>	10	est 280	4	EM	F	Typical and characteristic form Self set	35	3.4	B (i)
T47	Holly <i>Ilex aquifolium</i>	10	est 280	4	M	F	Typical and characteristic form Self set	35	3.4	C (i)
T48	Holly <i>Ilex aquifolium</i>	10	est 280	4	M	F	Typical and characteristic form Self set	35	3.4	C (i)
T49	Hawthorn <i>Crataegus monogyna</i>	10	est 280	4	M	F	Typical and characteristic form Self set	35	3.4	C (i)
T50	English Oak <i>Quercus robur</i>	10	est 300	4	M	F	Typical and characteristic form Self set	41	3.6	B (i)
T51	English Oak <i>Quercus robur</i>	16	est 1000	10	M	F	Typical and characteristic form Broken branches	452	12.0	A (i)
T52	English Oak <i>Quercus robur</i>	14	est 400	4	M	F	Typical and characteristic form Broken branches	72	4.8	B (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T53	English Oak Quercus robur	16	est 400	6	M	F	Typical and characteristic form Broken branches	72	4.8	A (i)
T54	English Oak Quercus robur	16	est 800	8	M	F	Typical and characteristic form Broken branches	290	9.6	A (i)
T55	English Oak Quercus robur	14	est 500	4	M	F	Typical and characteristic form Broken branches	113	6.0	A (i)
T56	English Oak Quercus robur	14	est 500	4	M	F	Typical and characteristic form Broken branches	113	6.0	A (i)
T57	English Oak Quercus robur	14	est 700	4	M	F	Typical and characteristic form Broken branches	222	8.4	B (i)
T58	Ash Fraxinus excelsior	14	est 700	8	M	P	Typical and characteristic form Broken branches Large cavity at base Evidence of past stem failure	222	8.4	C (i)
T59	Ash Fraxinus excelsior	14	est 800	8	M	P	Typical and characteristic form Broken branches Large cavity at base	290	9.6	C (i)
T60	English Oak Quercus robur	14	est 500	5	M	F	Typical and characteristic form Broken branches	113	6.0	A (i)
T61	English Oak Quercus robur	14	est 500	5	M	F	Typical and characteristic form Broken branches	113	6.0	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T62	English Oak Quercus robur	20	est 500	5	M	F	Typical and characteristic form Broken branches	113	6.0	A (i)
T63	English Oak Quercus robur	16	est 500	5	M	F	Typical and characteristic form Broken branches	113	6.0	A (i)
T64	Ash Fraxinus excelsior	14	est 400	5	M	F	Typical and characteristic form Broken branches Multi stemmed	72	4.8	C (i)
T65	Common Lime Tilia x europaea	14	est 400	5	M	F	Typical and characteristic form Broken branches Multi stemmed	72	4.8	B (i)
T66	English Oak Quercus robur	18	est 600	6	M	F	Typical and characteristic form Broken branches Situated offsite	163	7.2	A (i)
T67	English Oak Quercus robur	18	est 800	8	M	F	Typical and characteristic form Broken branches Close cultivation	290	9.6	A (i)
T68	English Oak Quercus robur	16	est 800	8	M	F	Typical and characteristic form Broken branches Close cultivation	290	9.6	A (i)
T69	Common Lime Tilia x europaea	12	est 400	4	M	F	Typical and characteristic form Broken branches Close cultivation	72	4.8	B (i)
T70	English Oak Quercus robur	20	est 1450	15	M	F / G	Ditch at base Wide spreading canopy No major defects Very prominent	707	Capped at 15m	A (i)

Tree No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
T71	English Oak Quercus robur	14	est 800	5	M	F / G	Ditch at base No major defects	290	9.6	A (i)
T72	English Oak Quercus robur	14	est 800	5	M	F / G	Ditch at base No major defects	290	9.6	A (i)
T73	English Oak Quercus robur	14	est 750	6	M	F / G	Adjacent to pond No major defects	254	9.0	A (i)
T74	English Oak Quercus robur	18	est 900	6	M	F	Adjacent to pond No major defects	366	10.8	A (i)
T75	English Oak Quercus robur	15	500	6	M	F	Characteristic for species Light ivy cover Minor dead wood evident in the crown (<75mm)	113	6.0	B (i)
T76	Hybrid Black Poplar Populus x canadensis	31	1200	8	M	G	Minor dead wood evident in the crown (<75mm) Prominent tree	651	14.4	B (i)
T77	Hybrid Black Poplar Populus x canadensis	31	1500	8	M	G	Broken branches evident Minor dead wood evident in the crown (<75mm) Prominent tree Broken branch hung up	707	Capped at 15m	B (i)
T78	Ash Fraxinus excelsior	15	450	5	M	F	Minor dead wood evident in the crown (<75mm) Pruning wounds noted	92	5.4	B (i)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
GROUPS OF TREES										
G1	Ash Fraxinus excelsior Crack Willow Salix fragilis	12	upto 460	5	EM	F	Branch stubs evident Close cultivation of the soil Dense undergrowth at the base Interlocking crowns Set around pond	96	5.5	C (ii)
G2	Ash Fraxinus excelsior English Oak Quercus robur Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Holly Ilex aquifolium Lawson Cypress Chamaecyparis lawsoniana Leyland Cypress Cupressocyparis leylandii	13	avg 500	6	EM / M	F	Branch stubs evident Dense undergrowth at the base Established ivy cover Minor dead wood evident in the crown (<75mm) Unable to gain access Offsite group in garden	113	6.0	B (ii)
G3	Crack Willow Salix fragilis	12	upto 400	5	EM	F	Branch stubs evident Close cultivation of the soil Dense undergrowth at the base Interlocking crowns Storm damage present Set around pond	72	4.8	C (ii)
G4	Crack Willow Salix fragilis Goat Willow Salix caprea Hawthorn Crataegus monogyna English Elm Ulmus procera	10	avg 250	4	SM	P / F	Branch socket cavities observed Broken branches evident Dead trees noted Dense undergrowth at the base Overhead cables Sporadic self-seeded group of trees	28	3.0	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G5	English Oak Quercus robur box Lawson Cypress Chamaecyparis lawsoniana Norway Spruce Picea abies Western Red Cedar Thuja plicata	6	est 160	2	EM	F	Topped in the past boundary group with neighbouring garden large gap in centre of group	12	1.9	C (ii)
G6	English Oak Quercus robur English Elm Ulmus procera	8	est 150	3	EM	P / F	Outgrown from hedgerow overhead wires hanging low within crown	10	1.8	C (ii)
G7	English Oak Quercus robur Hawthorn Crataegus monogyna	14	upto 520	6	M	F	Branch stubs evident Broken branches evident Close cultivation of the soil Dense ivy cover on main stem Minor dead wood evident in the crown (<75mm) Linear group adjacent to road	122	6.2	B (ii)
G8	Crack Willow Salix fragilis English Oak Quercus robur Goat Willow Salix caprea Hawthorn Crataegus monogyna Hazel Corylus avellana	13	upto 500	6	EM / M	P / F	Bark wounds noted Branch socket cavities observed Branch stubs evident Broken branches evident Close cultivation of the soil Group around pond and adjacent to road	113	6.0	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G9	Beech Fagus sylvatica Wild Cherry Prunus avium Weeping Willow Salix x sepulcralis 'Chrycosoma' Norway Spruce Picea abies	12	est 400	6	EM / M	F	Offsite trees in garden	72	4.8	B (ii)
G10	Ash Fraxinus excelsior English Oak Quercus robur Hawthorn Crataegus monogyna Hazel Corylus avellana	15	upto 700	8	EM / M	F	Basal suckers present Base obscured Branch socket cavities observed Branch stubs evident Broken branches evident Major dead wood evident in the crown (>75mm) Minor dead wood evident in the crown (<75mm) Larger trees to the south	222	8.4	B (ii)
G11	Ash Fraxinus excelsior Crack Willow Salix fragilis Hawthorn Crataegus monogyna Hybrid Black Poplar Populus x canadensis Hazel Corylus avellana	10	upto 280	3	EM / M	F	Characteristic for species Crossing and rubbing branches Outgrown hedgerow group	35	3.4	C (ii)
G12	Crack Willow Salix fragilis Elder Sambucus nigra Hawthorn Crataegus monogyna	6	avg 200	2	M	F	Outgrown hedgerow	18	2.4	C (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G13	Ash Fraxinus excelsior Crack Willow Salix fragilis Elder Sambucus nigra English Oak Quercus robur Hawthorn Crataegus monogyna	6	avg 200	3	EM / M	F	Large ditch at base Outgrown hedgerow	18	2.4	C (ii)
G14	Ash Fraxinus excelsior Crack Willow Salix fragilis Elder Sambucus nigra Goat Willow Salix caprea Hawthorn Crataegus monogyna Alder Alnus glutinosa	12	avg 250	4	EM / M	F	Large ditch at base Linear feature which separates field parcels	28	3.0	B (ii)
G15	Ash Fraxinus excelsior Blackthorn Prunus spinosa Common Lime Tilia x europaea Elder Sambucus nigra Field Maple Acer campestre Hawthorn Crataegus monogyna Silver Birch Betula pendula	12	est 300	4	EM / M	F	Linear group of trees Some sections maintained by flail	41	3.6	B (ii)

Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G16	Hawthorn <i>Crataegus monogyna</i>	6	est 100	2	M	F	Outgrown hedgerow	5	1.2	C (ii)
G17	Crack Willow <i>Salix fragilis</i> Wild Cherry <i>Prunus avium</i> Holly <i>Ilex aquifolium</i>	6	est 200	3	EM / M	P	Garden group Unmanaged	18	2.4	C (ii)
G18	Hawthorn <i>Crataegus monogyna</i> Wild Cherry <i>Prunus avium</i> Holly <i>Ilex aquifolium</i>	7	est 200	4	EM / M	F	Linear group	18	2.4	C (ii)
G19	Blackthorn <i>Prunus spinosa</i> Crack Willow <i>Salix fragilis</i> English Oak <i>Quercus robur</i> Hawthorn <i>Crataegus monogyna</i> Wild Cherry <i>Prunus avium</i>	18	avg 900	10	M	F	Group around pond High landscape value Typical form and features	366	10.8	A (ii)
G20	Blackthorn <i>Prunus spinosa</i> Crack Willow <i>Salix fragilis</i> English Oak <i>Quercus robur</i> Hawthorn <i>Crataegus monogyna</i> Wild Cherry <i>Prunus avium</i>	7	avg 250	4	EM / M	F	Outgrown linear feature running along ditch Occasional failed willow	28	3.0	C (ii)

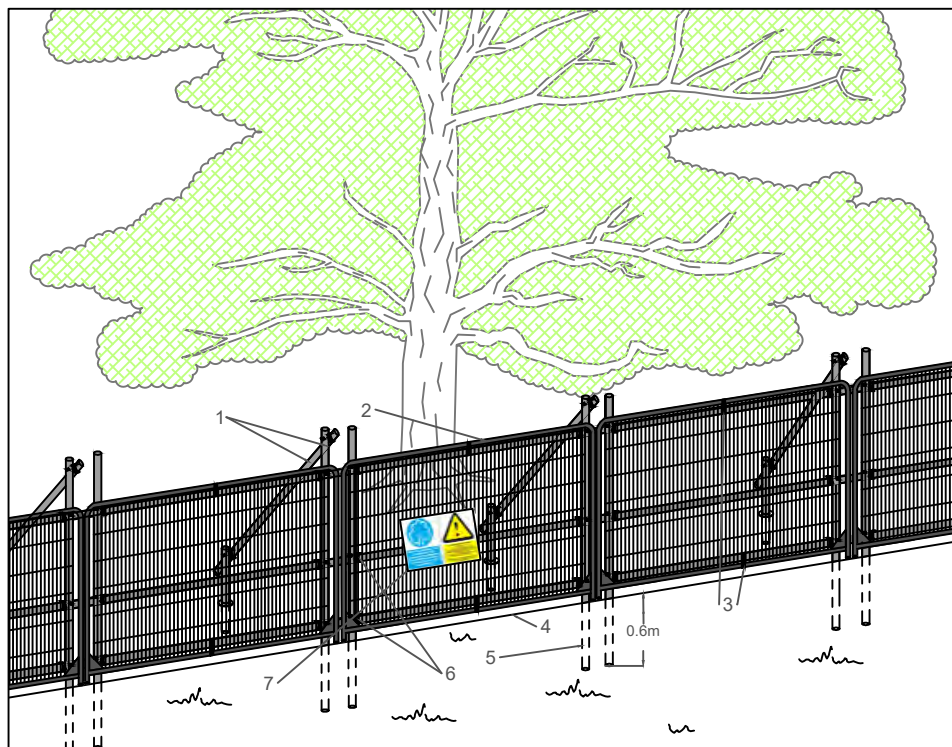
Group No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
G21	Ash Fraxinus excelsior Field Maple Acer campestre Hawthorn Crataegus monogyna Horse Chestnut Aesculus hippocastanum Silver Birch Betula pendula	13	upto 250	3	SM / EM	F	Boundary group of mixed species	28	3.0	B (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
HEDGEROWS										
H1	Ash Fraxinus excelsior Hawthorn Crataegus monogyna	2.5	upto 150	1	M	F	Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H2	Elder Sambucus nigra Hawthorn Crataegus monogyna Hazel Corylus avellana	2	upto 100	1	M	F	Gaps present in hedgerow Maintained hedgerow	5	1.2	C (ii)
H3	Ash Fraxinus excelsior Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Holly Ilex aquifolium	2.5	upto 150	1	M	F	Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H4	Ash Fraxinus excelsior Hawthorn Crataegus monogyna Sycamore Acer pseudoplatanus Holly Ilex aquifolium	3	upto 150	1	M	F	Gaps present in hedgerow Maintained hedgerow	10	1.8	C (ii)
H5	Hawthorn Crataegus monogyna English Elm Ulmus procera	3	upto 100	1	M	F	Gaps present in hedgerow Maintained hedgerow	5	1.2	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H6	Hawthorn Crataegus monogyna English Elm Ulmus procera	3	upto 100	1	M	F	Maintained hedgerow	5	1.2	C (ii)
H7	Beech Fagus sylvatica Hawthorn Crataegus monogyna Holly Ilex aquifolium	2	upto 100	0.5	M	F	Maintained hedgerow	5	1.2	C (ii)
H8	Elder Sambucus nigra Hawthorn Crataegus monogyna Hazel Corylus avellana	2	upto 100	1	M	F	Gaps present in hedgerow Maintained hedgerow	5	1.2	C (ii)
H9	Beech Fagus sylvatica Hawthorn Crataegus monogyna Holly Ilex aquifolium	2	upto 100	0.5	M	F	Maintained hedgerow	5	1.2	C (ii)
H10	Hawthorn Crataegus monogyna English Elm Ulmus procera	3	upto 100	1	M	F	Gaps present in hedgerow Maintained hedgerow	5	1.2	C (ii)
H11	Hawthorn Crataegus monogyna English Elm Ulmus procera Hazel Corylus avellana	2	upto 100	1	M	F	Gaps present in hedgerow Maintained hedgerow	5	1.2	C (ii)

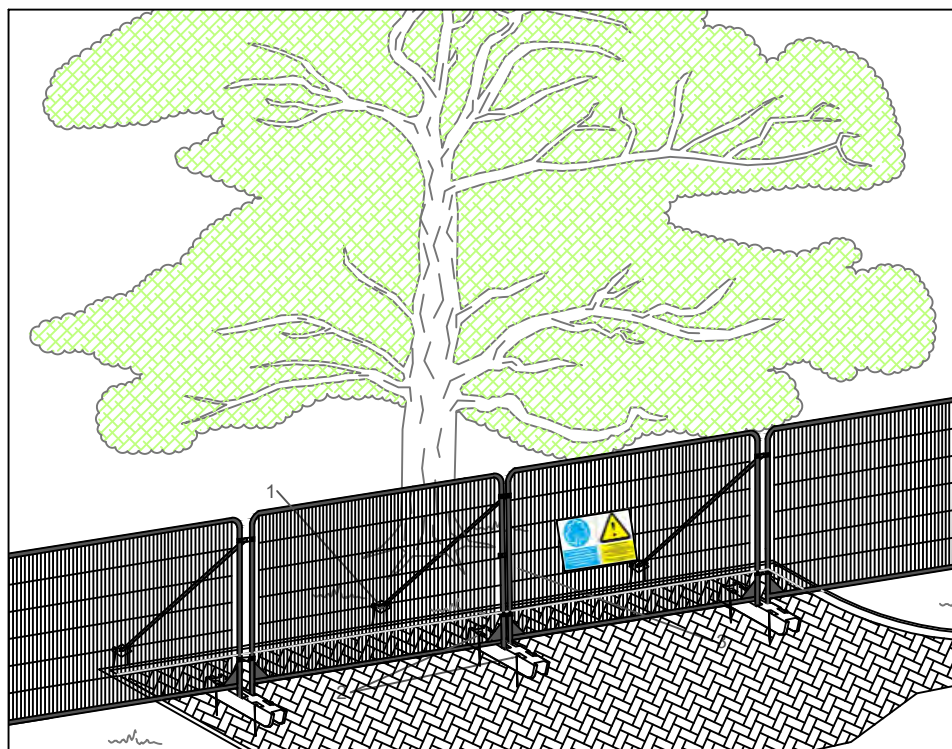
Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H12	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Holly Ilex aquifolium	2	est 6x 60	0.5	M	F	Maintained boundary hedgerow	10	1.8	C (ii)
H13	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Holly Ilex aquifolium	2	est 6x 60	0.5	M	F	Maintained boundary hedgerow	10	1.8	C (ii)
H14	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Holly Ilex aquifolium	4	est 6x 60	0.5	M	F	Maintained boundary hedgerow Sporadic Gaps present	10	1.8	C (ii)
H15	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Hazel Corylus avellana Holly Ilex aquifolium	3	est 6x 60	0.5	M	F	Maintained boundary hedgerow	10	1.8	C (ii)

Hedge No	Species	Height	Stem Dia.	Crown Radius	Age Class	Overall Condition	Structural Condition	RPA	RPA Radius	BS5837 Cat
H16	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Hazel Corylus avellana Holly Ilex aquifolium	3	est 6x 60	0.5	M	F	Maintained boundary hedgerow Running along edge of road	10	1.8	C (ii)
H17	Common Lime Tilia x europaea English Oak Quercus robur Field Maple Acer campestre Hawthorn Crataegus monogyna Hazel Corylus avellana	3	est 6x 60	0.5	M	F	Maintained boundary hedgerow Running along edge of road	10	1.8	C (ii)
H18	Blackthorn Prunus spinosa Hawthorn Crataegus monogyna Wych Elm Ulmus glabra Holly Ilex aquifolium	2	est 6x 60	0.5	M	F	Maintained boundary hedgerow	10	1.8	C (ii)



Standard specification for protective barrier

1. Standard scaffold poles
2. Heavy gauge 2m tall galvanized tube and welded mesh infill panels
3. Panels secured to scaffold frame with wire ties
4. Ground level
5. Uprights driven into the ground until secure (min depth of 0.6m)
6. Standard scaffold clamps
7. Construction Exclusion Zone signs



Above ground stabilising systems

1. Stabiliser strut with base plate secured with ground pins
2. Feet blocks secured with ground pins
3. Construction Exclusion Zone signs

NOTES

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APPENDIX B PROTECTIVE FENCING SPECIFICATIONS

CAD file: S:\Arb resources\Basic Templates\Tree Protection\Appendix B - Protective Fencing A4.dwg