

Barnsley West

Arboricultural Report

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1.0 SUMMARY

- 1.1.1 Tetra Tech was commissioned to consider the impact on trees of development of land of land the west of Barnsley. The assessment is based on a tree survey carried out in accordance with BS5837:2012.
- 1.1.2 The survey site is bounded by the villages of Higham, Barugh Green, Redbrook, Gawber and Pogmore, and lies directly to the east of the M1 motorway, just north of junction 37. The largest part of the land comprises an extensive area of agricultural fields that are dissected by a rural road known as Hermit Lane. There is a substantial deciduous woodland feature that follows the course of a system of steep-sided stream gullies that flow north-east through the eastern part of the survey area.
- 1.1.3 The survey updated a previous tree survey carried out by WYG in 2018. The survey of trees at the site assessed 172 individual trees, 23 groups of trees and 40 hedge sections. This included trees located on-site and those located on adjoining land that may be affected by development of the site.
- 1.1.4 Part of the deciduous woodland that is situated in the east of the survey area is protected by a woodland Tree Preservation Order. The land does not lie within a Conservation Area.
- 1.1.5 Twenty individual trees and four groups of trees have been assigned to the high quality and value category (BS5837 A category). Forty six individual trees and nine groups of trees have been assigned to the moderate quality and value category (BS5837 B category). Ninety one individual trees, ten groups of trees and all of the 40 sections of field hedging that are located within the survey area have been assigned to the low quality and value category (BS5837 C category). Fifteen trees have been classified as unsuitable for retention (BS5837 U category) and would require felling irrespective of any development.
- 1.1.6 The proposed development works will require the removal of all of the trees on the site with the exception of most of the two areas of gully woodland, and trees located within them. All hedgerows on the site will be removed. All off-site trees and woodland will be retained, although some trees located close to the boundaries will be felled. The trees located beyond the retained woodland and the hedgerows require removal either because they are located on the footprint of proposed buildings and roads, or because they are located in areas of proposed level change. The trees to be felled include 11 trees of high quality (A category) and 34 trees of moderate quality (B category). The groups to be removed include one group of high quality (A category), parts of two groups of high quality and four groups of moderate quality (B category). All other trees and groups, and all hedges, to be felled, are either features of low quality (C category), or are unsuitable for retention (U category).
- 1.1.7 The report includes a Preliminary Arboricultural Method Statement and Tree Protection Plan, which contain proposals for the protection of the retained trees during the construction period. These should be subject to amendment once final design details are available.

2.0 INTRODUCTION

2.1. SCOPE & BRIEF

- 2.1.1 Tetra Tech was commissioned to consider the impact on trees of development on land west of Barnsley in South Yorkshire.
- 2.1.2 The assessment is based on a tree survey carried out in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations'¹. This determined the size, condition and value of the trees, and provided recommendations for remedial work and root protective distances to ensure the future health and stability of retained trees.
- 2.1.3 The survey updated a previous trees survey carried out by WYG (now Tetra Tech) in 2018².
- 2.1.4 The report includes an Arboricultural Impact Assessment to identify the necessary felling and pruning works, and tree protection details in the form of a Preliminary Arboricultural Method Statement and Tree Protection Plan. These should be subject to amendment once detailed design details are available.
- 2.1.5 The survey was carried out by Guy Morrison DipArb (RFS) MICFor MArborA who is an arboricultural consultant and associate of Tetra Tech.

2.2. SURVEY LIMITATIONS

- 2.2.1 Trees were assessed visually from ground level. No climbed inspection, removal of ivy or detailed investigation of decay was made.
- 2.2.2 Tree condition can change significantly over a relatively short period of time, and therefore the results and recommendations of this survey can only be held to be valid for a period of 18 months following the survey date.

¹BS5837:2012. *Trees in Relation to Design, Demolition and Construction – Recommendations*, British Standards Institute, 2012

² *Barnsley West – Tree Survey Report*. WYG, December 2018

3.0 SITE DESCRIPTION

3.1. LAND-USE

3.1.1 The survey site currently comprises an extensive area of largely open agricultural fields which are criss-crossed by a system of hawthorn field hedges. There are a number of steep-sided tree-lined gullies situated within the eastern part of the site which coalesce as they flow northwards and where they form more substantial areas of woodland.

3.2. SITE LOCATION & BOUNDARIES

3.2.1 The land is located approximately 2.75km north-west of Barnsley city centre. It is situated directly to the north-east of junction 37 of the M1 motorway, with which it shares a part of its boundary. The land is bounded by the villages of Higham to the west, Barugh Green and Redbrook to the north, and Gawber to the east. The outskirts of the suburb of Pogmoor lie directly to the south and east of the site.

3.2.2 Residential properties of the surrounding villages make up a large proportion of the perimeter of the land, with gardens and houses that are part of Higham and Pogmore forming extensive sections of the site boundary to the north-west and the south-east respectively. A relatively small housing estate associated with Redbrook and Redbrook Farm are present to the very north-east of the survey area. The A635 Barugh Green Road forms the northern extent of the site where a garden centre and small number of properties are also situated, but which are not included in the survey.

3.2.3 The watercourse that forms a tree-lined gully to the east of the survey area appears to mark the eastern extent of the land in the central part, with the associated area of woodland partly within and partly outwith the survey area. The embankment of the M1 motorway forms approximately 860m of the boundary of the land on its south-western edge. Hermit Lane is a rural road which bisects the land in an east west direction and Hermit House Farm is located centrally within the survey area mid-way along Hermit Lane.

3.2.4 A network of public footpaths and bridleways provide access to the land.

3.2.5 The site centre's OS grid reference is SE 317070.

3.3. TOPOGRAPHY & SOILS

3.3.1 The site is located on a hillside with the highest point in the south where the site meets the M1 motorway, the land then falls away steeply towards the north. There are a number of steep interconnected tree-lined gullies located in the east of the survey area which drain the land towards the north and east.

3.3.2 The British Geological Survey Geology of Britain viewer³ shows that the bedrock at the site is sandstone of the Pennine Middle Coal Measures Formation. No superficial deposits are recorded.

³ <http://mapapps.bgs.ac.uk/geologyofbritain3d/index>

- 3.3.3 The Cranfield Soil and Agrifood Institute Soilscales viewer⁴ shows soils at the site to be slowly permeable seasonally wet acid loamy and clayey soils.

3.4. STATUTORY PROTECTION

Tree Preservation Order/Conservation Areas

- 3.4.1 The on-line facility⁵ of Barnsley Metropolitan Borough Council shows that the deciduous woodland that is situated around steep gullies to the east of the survey area, north of Hermit Lane, is protected by a woodland Tree Preservation Order (TPO), with the exception of the extent of one leg in the south-western part. This includes most of group G22, and tree T68 within the woodland. Woodland to the south of Hermit Lane is not currently protected.
- 3.4.2 Permission is required from the local planning authority (LPA) to fell or prune trees protected by TPO, subject to several statutory exemptions⁶. It is an offence to carry out this work, or to kill or damage a protected tree, without consent except where an exemption applies. There is an exemption from the requirement to obtain consent where the works are required to implement a scheme that has received full planning permission.
- 3.4.3 The website also shows that the site does not lie within a Conservation Area.

Felling Licences

- 3.4.4 Tree felling on non-residential land is also controlled by the need to obtain a tree felling licence from the Forestry Commission before felling more than five cubic metres in any calendar quarter (e.g., Jan to Mar, Apr to Jun, Jul to Sep and Oct to Dec), as long as no more than two cubic metres are sold, subject to various exemptions and variations⁷.

Protected Species

- 3.4.5 Trees and scrub provide habitat for a wide range of species, some of which are protected. Most nesting birds and their nests are protected by the Wildlife and Countryside Act 1981 (as amended). All bats and their roosts are protected by the Wildlife and Countryside Act 1981 (as amended) and gain additional protection under the Conservation of Habitats and Species Regulations 2010 (as amended). Birds listed under Schedule 1 of the Wildlife and Countryside Act 1981 are also protected from disturbance when building a nest, nesting, or when dependent young are at or near the nest.

Hedgerow Regulations

- 3.4.6 Hedgerows on agricultural land are protected under the Hedgerow Regulations 1997⁸. Hedgerows should not be removed without serving appropriate notice on the local planning authority, who can require the retention of hedgerows deemed 'important' under the Regulations.

⁴ www.landis.org.uk/soilscales/

⁵ www.barnsley.gov.uk/services/parks-and-open-spaces/tree-preservation-orders/, accessed 26/04/21

⁶ www.gov.uk/guidance/tree-preservation-orders-and-trees-in-conservation-areas

⁷ www.forestry.gov.uk/england-fellinglicences

⁸ www.gov.uk/guidance/countryside-hedgerows-regulation-and-management

Veteran Trees & Ancient Woodland

- 3.4.7 Ancient woodland and veteran trees gain status in the National Planning Policy Framework 2019⁹. None of the trees on and adjacent to the site are recorded on the Woodland Trust's Ancient Tree Inventory¹⁰. None of the woodland on or immediately adjoining the site is recognised as ancient woodland¹¹.

⁹ www.gov.uk/government/collections/revised-national-planning-policy-framework

¹⁰ <https://ati.woodlandtrust.org.uk/tree-search/>, accessed 26/04/21

¹¹ <https://magic.defra.gov.uk/>, accessed 26/04/21

4.0 TREE SURVEY

4.1. METHODOLOGY

- 4.1.1 The site was visited during May 2021 to carry out an assessment in accordance with BS5837:2012. The survey updated a previous tree survey carried out by WYG in 2018.
- 4.1.2 A topographical survey plan was provided and used as a base for the Tree Constraints Plan (Appendix D). Some of the surveyed trees were not shown on the topographical plan and the approximate position of these trees was determined using a tablet GPS and laser rangefinder. It is recommended that the accurate position of these trees (T17, T22, T33, T39, T40, T59, T62, T63, T68, T93, T114, T127, T150, T158 and T162) is determined if the trees are proposed for retention adjacent to proposed development works.
- 4.1.3 The survey assessed individual trees in the immediate vicinity of the land, along with a small number of off-site trees and groups of trees that might require consideration during the planning process.
- 4.1.4 The following information was collected for each tree: species, age class, height, stem diameter at 1.5m above ground level, crown spread in the four cardinal directions and height of the crown above the ground (excluding basal sprouts and epicormic branches). Tree age class categories are listed below:
- Young (Y) - <1/3 of life expectancy;
 - Semi-mature (SM) - 1/3 – 1/2 of life expectancy;
 - Early-mature (EM) – 1/2 - 2/3 of life expectancy;
 - Mature (M) - >2/3 of life expectancy; and
 - Late-mature (LM) - >2/3 of life expectancy, and crown retracting due to age.
- 4.1.5 An assessment was made of the trees' physiological and structural condition, noting any disorders or biomechanical features that present an obvious hazard to present or future users of the site or affect the trees' life expectancy.
- 4.1.6 Preliminary management works were proposed in order to either remove/reduce hazards or promote good future growth of the tree.
- 4.1.7 The trees' overall quality and value for retention was assessed in accordance with BS5837:2012 Table 1 (Appendix C). This was dependent on the trees' physiological and structural condition, safe useful life expectancy and arboricultural, landscape, cultural, ecological value and amenity value (as a function of size, prominence, attractiveness and screening).
- 4.1.8 The root protection area (RPA) radius and area for each tree was also calculated in accordance with BS5837:20012. The RPA is an area of ground that provides sufficient soil rooting volume to ensure the survival of the tree.
- 4.1.9 The Tree Constraints Plan (Appendix D) shows the RPA of trees of the individually surveyed trees. The distribution and shape of the RPA reflects the opportunities for rooting available to each tree. Irregularly shaped RPAs have been drawn where there are significant obstacles to rooting caused by buildings or major roads.

4.2. SURVEY RESULTS

- 4.2.1 The survey of trees at the site assessed 172 individual trees, 23 groups of trees and 40 hedge sections.
- 4.2.2 The full survey results are given in the survey schedule in Appendix A and the trees are shown on the Tree Constraints Plan. The following provides a summary of these results, with a description included below.

Tree Species

- 4.2.3 The Figure 1 below illustrates the range of species recorded at the site, and the frequency of each species.

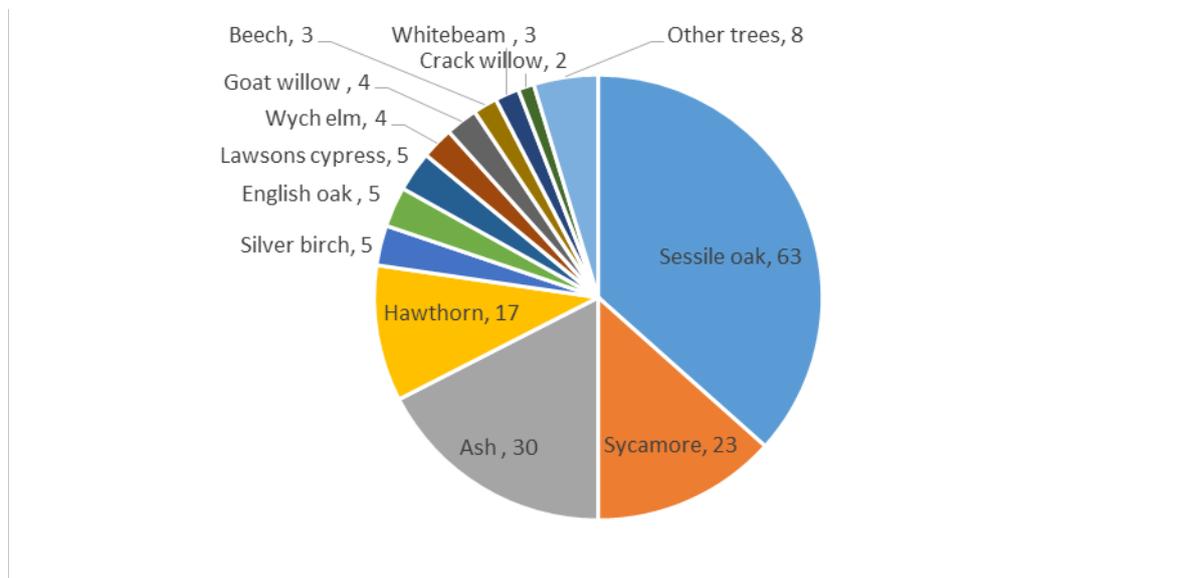


Figure 1: Showing the species mix of trees recorded as individuals in the survey.

- 4.2.4 The vegetation over the agricultural landscape that makes up the majority of the survey area is sparse both in number of species and in number of trees recorded. The land is criss-crossed by a network of field hedges that while established, are almost exclusively hawthorn (*Crataegus monogyna*) of even age, and which in most areas have seen very little management. All are factors which suggest that the hedgerow system has been planted relatively recently (within the last 50 years). The species that make up the small number of trees present within agricultural landscape are ash (*Fraxinus excelsior*), sessile oak (*Quercus petraea*), English oak (*Quercus robur*), sycamore (*Acer pseudoplatanus*) and holly (*Ilex aquifolium*), along with short row of mature beech (*Fagus sylvatica*) that are in poor condition and which are planted close to houses at the south-eastern edge of the land.
- 4.2.5 There is better diversity and quality within the interconnected woodland features that occur towards the east of the survey area in its central part. By far the dominant species within the wooded areas is sessile oak, and it was noted that these were all relatively even-aged with the majority recorded as early-mature and a smaller number considered to be mature. No late-mature or veteran trees were recorded within the wooded areas, suggesting a period of significant plantation perhaps in the late 19th or first part of the 20th century. Other tree species present within the woodland groups are ash, sycamore, silver birch (*Betula pendula*), wych elm

(*Ulmus glabra*), hazel (*Corylus avellana*), field maple (*Acer campestre*), hawthorn, crab apple (*Malus sylvestris*), bird cherry (*Prunus padus*), blackthorn (*Prunus spinosa*) and goat willow (*Salix caprea*). Common alder (*Alnus glutinosa*) and crack willow (*Salix fragilis*) were also noted in the woodland groups and were more common within a leg to the west of the woodland groups where the water is slower to drain and a number of small ponds are present. The presence of such a density of oak trees within the wooded areas provides an excellent opportunity to develop and manage this part of the land as a valuable asset both in terms of amenity and for its ecology.

- 4.2.6 A row of multi-stemmed whitebeam (*Sorbus aria*) interspersed with self-set wych elm is planted between Hermit Lane and a copse of high-quality trees towards the centre of the survey area.
- 4.2.7 There is a semi-mature off-site motorway planting scheme on the embankment of the M1 where it meets the land to the south-west and species recorded within are ash, small-leaved lime (*Tilia cordata*), English oak, sycamore, bird cherry, hawthorn and rowan (*Sorbus aucuparia*). Three further small semi-mature areas of roadside planting share a boundary with the land in its south-western part and these were seen to contain ash, blackthorn, crab apple, field maple, common alder, sycamore, hawthorn, wild cherry (*Prunus avium*) and rowan. It was noted that ash was the dominant species in both the motorway and roadside plantations and as such there is an inherent vulnerability of these groups to chalara dieback of ash (*Hymenoscyphus fraxineus*).
- 4.2.8 Semi and early-mature Lawson's cypress (*Chamaecyparis lawsoniana*), domestic apple (*Malus domestica*), and variegated holly were present within the gardens of Hermit House Farm.
- 4.2.9 A walkover viewing of the many gardens that abut the survey area was undertaken in order to record any trees or hedges that might be affected by development of the land, these were only recorded within the survey where considered to be significant. Tree species that were viewed within private gardens close to the survey area included cherry laurel (*Prunus laurocerasus*), Leyland cypress (*x Cupressocyparis leylandii*), hawthorn, rowan, ash, goat willow, crack willow, silver birch, horse chestnut (*Aesculus hippocastanum*), European larch (*Larix decidua*) and cider gum (*Eucalyptus gunnii*). It was noted generally that the majority of the properties with gardens that adjoin the survey area are of a relatively modern construction and as such there were very few trees of any maturity present within.

Tree Age

- 4.2.10 The majority of trees on the site are early-mature and semi-mature, with a lesser number of mature trees, occasional young trees, and single late-mature tree. Figure 2 below illustrates the range of age categories recorded at the site, and the frequency of each age category.

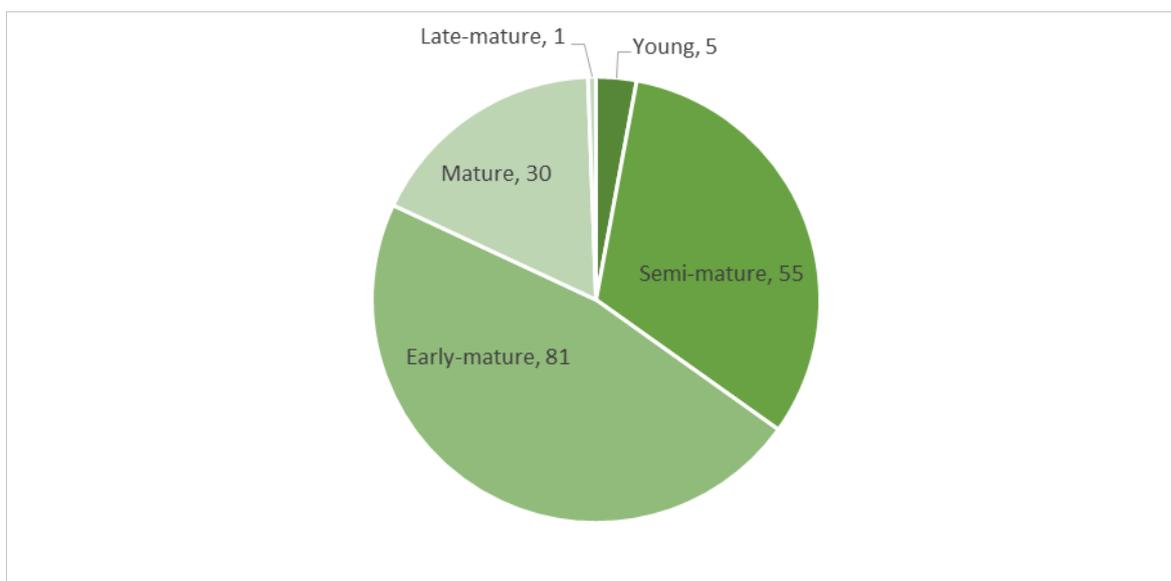


Figure 2: Showing the age spread of trees recorded as individuals in the survey.

Tree Quality & Value

4.2.11 The individual trees and groups of trees were assigned to Categories A, B, C and U in accordance with BS5837 as summarised in Table 1 below.

Table 1. Number of trees, groups of trees and hedges assigned to BS5837 categories

	Individual Trees	Groups of Trees	Hedges
Category A <i>Trees of high quality & value</i>	20	4	0
Category B <i>Trees of moderate quality & value</i>	46	9	0
Category C <i>Trees of low quality & value</i>	91	10	40
Category U <i>Trees unsuitable for retention</i>	15	0	0
Total	172	23	40

High Quality & Value

4.2.12 Twenty individual trees and four groups of trees have been assigned to the high quality and value category (A category). Trees in this category would be expected to make a substantial contribution for a period of at least 40 years.

4.2.13 All of the individual trees that have been assigned to the A category are sessile oak, 13 of which are considered early-mature, and seven classed as mature. All these trees are located towards the east of the survey area where the majority are associated with the three high quality woodland groups G1, G17 and G22. These trees were chosen only as samples within the groups, or because they hold a dominant position on the landscape, and as such they should not be considered as an exhaustive list of high quality trees. The trees that have been surveyed as individuals and assigned to this category are: T20, T42, T62, T64, T67, T69, T85, T90, T115, T116, T119, T120, T125, T133, T138, T142, T143, T145, T153 and T157.



Image 1: Oak T125 on the southern edge of woodland G22 (A category).



Image 2: Oak trees T115-120 (A/B categories) on the southern edge of woodland G22 (A category).



Image 3: Oak trees T69-89 along Hermit Lane (A/B categories).

- 4.2.14 Of the four groups of trees that have been assigned to category A, two (G17 and G22) are areas of extensive woodland of mixed broadleaved species, situated to the east of the site where they line steep sided gullies that drain the land towards the north and east. The canopies of the two groups are connected and bisected only by Hermit Lane. Group G17 is situated to the north of Hermit Lane and group G22 to the south. The species mix within groups G17 and G22 is dominated by sessile oak of relatively even age, also present within the woodlands are ash, sycamore, wych elm, field maple, hazel, birch, goat willow, crab apple, common alder, crack willow, bird cherry and hawthorn. There are numerous trees within groups G17 and G22 which if surveyed as individual trees would qualify for the high quality and value category on their own merit. The largest part of group G22 is subject to a Tree Preservation Order (TPO), which only excludes a leg to the very south-west extent of the group.
- 4.2.15 Group G1 is a copse like feature that is situated on the north side of Hermit Lane close to the centre of the survey area where it has a level of connectivity with group G22. All of the significant trees within this feature have also been surveyed and recorded individually, with a number found to be of high quality. To provide consistency with nearby woodland groups, group G1 was similarly recorded as a group and considered to be of high quality and value.
- 4.2.16 The fourth group to be assigned to the high quality and value category (category A) is group G15, an area of woodland situated on a hillside between the survey area and a school and which is located off-site. This group was viewed from a distance and seen to contain ash, sycamore, sessile oak, hazel, field maple and hawthorn. The group provides good amenity and screening for the school. There is connectivity between groups G15 and G17.
- 4.2.17 It is recommended that, if retained, the woodland groups are fully surveyed in light of any development in order to assess risk posed by the new land usage and to inform management plans to enhance the woods into the future.



Image 4: Southern end of woodland G17 (A category), with prominent oak T38 (centre) (U category).



Image 5: Woodland G22, viewed from the west (A category).



Image 6: Interior of woodland G22 (A category).



Image 7: Roadside copse G1 (A category), with row of trees G18 to front (C category).

Moderate Quality & Value

- 4.2.18 Forty six individually surveyed trees and nine groups of trees have been assigned to the moderate quality and value and category (Category B). Trees in this category have a useful life expectancy of 20 years, though many will contribute well in excess of this.
- 4.2.19 Twenty eight of the individually surveyed trees have been assigned to this category because they do not yet have the maturity and size to qualify for the higher category and in many cases are being suppressed by the better and more dominant trees within their group, these are 21 sessile oak (T66, T71, T72–T75, T79, T80, T86a, T86b, T88, T89, T92, T97, T100, T101, T129, T136, T150, T154 and T158), four sycamore (T99, T132, T148 and T151), two ash (T83

and T121) and one wych elm (T68). It should be remembered that these trees do have the potential to move into the higher quality and value category as they mature.

- 4.2.20 A further 18 trees have been assigned to the moderate category because they typically have minor defects, lack the form, or do not possess the vigour and longevity necessary for the higher category. These trees are eight sessile oak (T29, T31, T61, T91, T93, T114, T117 and T118), four ash (T34, T59, T126 and T170), a beech (T24), a sycamore (T127), a goat willow (T163), a silver birch (T164), an English oak (T167), and a field maple (T168).
- 4.2.21 Notable amongst the trees classified as of moderate quality is T24, a mature beech tree which was formerly part of a row of three similar trees. One of the other trees (T23) has failed since the previous survey, and the other (T25) was found to be in such poor condition that it has been recommended for removal. It was noted during the survey that bulging that might be indicative of internal decay was evident at the base of T24. If the tree is proposed for retention, it is recommended that further investigations are carried out into the condition of T24 to clarify its suitability for retention within the context of the development, and if retained, to inform a possible management plan for the tree.



Image 8: Beech T24 (centre) (B category) and beech T25 (left) (U category).



Image 9: Oak T91 beside Hermit Lane (B category).

4.2.22 Of the nine groups of trees that have been assigned to the moderate quality and value category, group G11 is a copse of hawthorn, ash, sessile oak, hazel and crab apple lining a watercourse at the bottom of a gully, and which marks the beginning of the woodland feature that becomes the higher quality groups G17 and G22 further to the north. Group G9 is a hawthorn and ash hedge that provides useful screening and amenity between a residential road and the potential development site but which is in poor condition and will require management if retained. Group G13 is a semi-mature mixed species plantation in the corner of an arable field that similarly provides screening to existing residents. Groups G5, G6 and G8 are all off-site mixed species semi-mature plantations that provide screening between the site and roads to the south, with G5 being the best part of the plantation on the motorway embankment. Groups G2, G3 and G16 are all off-site hedges worthy of consideration and so have been included within this category.



Image 10: Offsite plantation G5 on the verge of the M1 motorway (B category).

Low Quality & Value

- 4.2.23 Ninety one individual trees, ten groups of trees and all 40 of the hedge sections that were included in the survey have been assigned to the low quality and value category (category C).
- 4.2.24 These are generally trees of poor form or with severe defects or low vigour, such that they are unlikely to live beyond 20 years, or trees that lack maturity and can easily be replaced with considerate supplementary planting within the design.
- 4.2.25 Tree T3 is a mature ash tree on the site boundary which has been assigned to this category. The tree has been heavily pollarded in the past and branches are vulnerable to collapse as they regrow from weakened attachment points. The tree also shows evidence of stem decay. The tree requires repollarding if it is retained.
- 4.2.26 Tree T169 is a mature ash tree located off-site (within a private garden) which has been assigned to this category. It was viewed from the boundary was seen to be heavily colonised by the decay fungus *Inonotus hispidus*, with extensive fruiting bodies and historic scarring evident. It also appears to be suffering from ash dieback disease. It is recommended that the owner of the tree commissions a fuller investigation.



Image 11: Previously pollarded ash T3 on the boundary (C category).

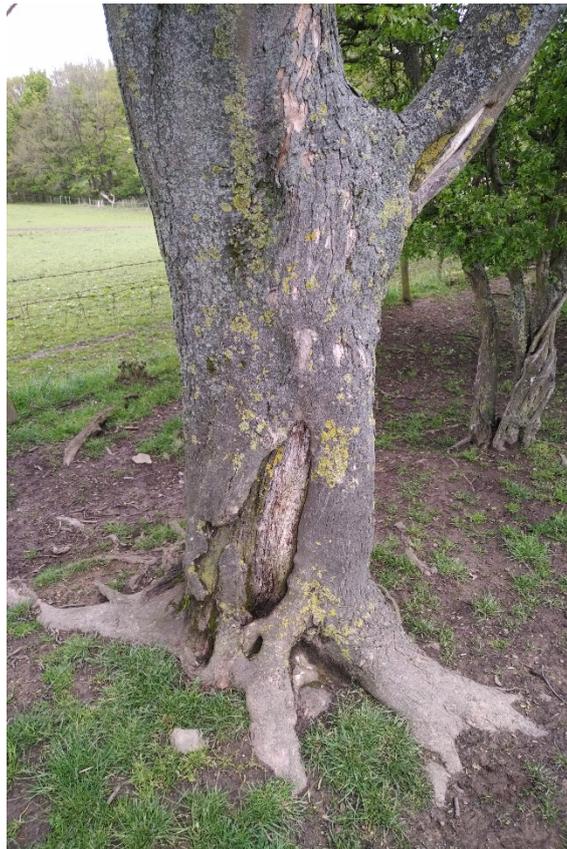


Image 12: Sycamore T30 with significant stem bark damage (C category).

4.2.27 Of the groups that are considered to be of low quality and value, G18 is a row of multi-stemmed whitebeam interspersed with self-set wych elm, planted between Hermit Lane and a copse of better trees located towards the centre of the survey area, and groups G4 and G7 are

off site semi-mature mixed species groups close to the southern part of the survey area that lack the maturity to contribute greatly and could easily be replaced.

- 4.2.28 All of the 40 hedge sections have been assigned to the low quality and value category. The hedges are almost exclusively even-aged hawthorn with very little species diversity within suggesting relatively young plantation with little cultural value, and similarly could easily be replaced.



Image 13: Trimmed hawthorn hedges H25 and H26 along Hermit Lane (C category).



Image 14: Untrimmed hawthorn hedge H28 (C category).

Unsuitable for Retention

4.2.29 Fifteen individually surveyed trees have been identified as being unsuitable for retention (Category U). Trees in this category are either dead or unlikely to have a lifespan beyond ten years and in most cases would require felling irrespective of any development.

- T8 is a collapsed ash tree.
- T21 is an early-mature oak with extensive decay in the stem.
- T22 is a dead crack willow located offsite.
- T23 is a collapsed beech tree.
- T25 is a mature beech with extensive stem decay.
- T38 is a mature oak that has been subjected to extensive stock browsing.
- T60 is an early-mature oak that has suffered significant crown collapse.
- T65 is a semi-mature sycamore that has been subjected to extensive stock browsing.
- T96 is an early-mature elm that is suffering from Dutch elm disease.
- T98 is a mature whitebeam in terminal decline.
- T105 is a tall stump of a felled sycamore.
- T134 is an early mature multi-stemmed sycamore in terminal decline.
- T137 is a semi-mature sycamore that is in terminal decline.
- T144 is an unidentified dead tree that has failed and is hung up in a neighbour.
- T152 is a dead semi-mature sycamore tree.



Image 15: Fallen beech T23 (right) (U category) and beech T24 (left) (B category)



Image 16: Decayed cavity in beech T25 (U category).



Image 17: Decayed cavity in oak T21 (U category).

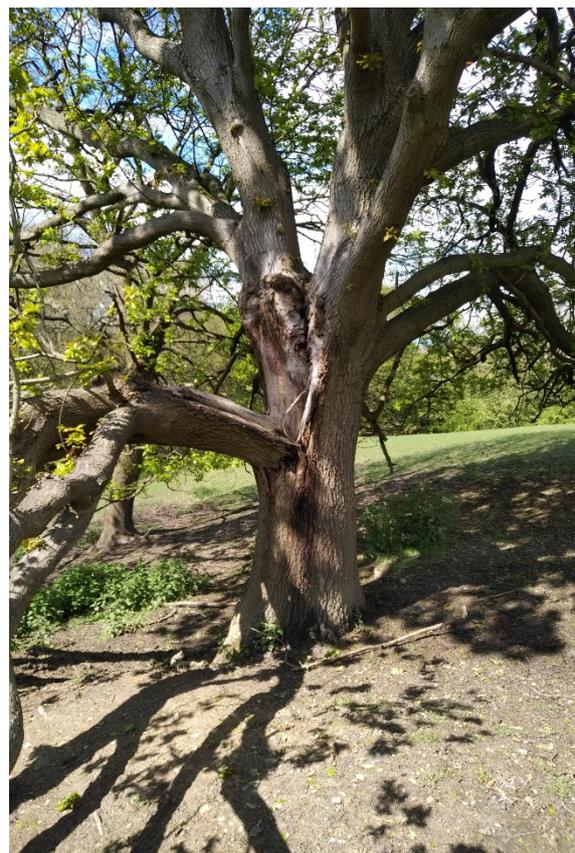


Image 18: Split oak T60 (U category).

5.0 ARBORICULTURAL IMPACT

5.1. DEVELOPMENT PROPOSAL

5.1.1 This assessment is based on the following drawings:

- *Barnsley West Masterplan – Proposed Site Plan*. Bond Bryan drawing no. BWM-BBA-ZZ-XX-DR-A-1004/S2/PO5
- *Barnsley West – Earthworks Plan - JPG drawing no. 4848-JPG-XX-00-DR-C-1207-S4-P07_Proposed_Levels_With_Developable_Plateaus*
- *Barnsley West – FW Drainage Strategy*. JPG drawing no. 4848-JP-SW-00-DR-D-1411-1413/P03
- *Barnsley West – SW Drainage Strategy*. JPG drawing no. 4848-JP-SW-00-DR-D-1415-1417/P03
- *Barnsley West – Land Drainage Strategy*. JPG drawing no. 4848-JP-SW-00-DR-D-1461-1463/P02

5.1.2 It is proposed to carry out a large-scale mixed development of the site, with housing and industrial/commercial development. The scheme includes associated highways, public open space, surface water drainage features and landscaping. The scheme includes large-scale earthworks, with cut or filled embankments around most of the boundaries.

5.1.3 The proposed layout, including earthworks, is shown on the Tree Protection Plan (Appendix E).

5.2. TREE REMOVAL IMPACTS

5.2.1 The proposed development works will require the removal of all of the trees on the site with the exception of most the two areas of gully woodland G17 and G22, and trees located within them. All hedgerows on the site will be removed. All off-site trees and woodland will be retained, although some trees located close to the boundaries will be felled.

5.2.2 The trees located beyond the retained woodland and the hedgerows require removal either because they are located on the footprint of proposed buildings and roads, or because they are located in areas of proposed level change.

5.2.3 The trees to be felled include 11 trees of high quality (A category) and 34 trees of moderate quality (B category). The groups to be removed include one group of high quality (A category) and four groups of moderate quality (B category). Parts of two other groups of high quality will also be removed. All other trees and groups, and all hedges, to be felled are either trees or features of low quality (C category), or are unsuitable for retention (U category).

5.2.4 The individual trees which would require removal to achieve the development are:

- T1 – Ash – C
- T2 – Hawthorn – C
- T6 - Ash - C
- T7 - Hawthorn - C

- T8 - Ash - U
- T9 - Oak - C
- T10 - Ash - C
- T11 - Oak - C
- T12-14 - Ash - C
- T18-19 - Hawthorn - C
- T20 - Oak - A
- T21 - Oak - U
- T23 - Beech - U
- T24 - Beech - B
- T25 - Beech - U
- T26-27 - Hawthorn - C
- T28 - Oak - C
- T29 - Oak - B
- T30 - Sycamore - C
- T31 - Oak - B
- T32 - Birch - C
- T33 - Ash - C
- T34 - Ash - B
- T35 - Ash - C
- T36-37 - Birch - C
- T43-44 - Hawthorn - C
- T45 - Sycamore - C
- T46 - Goat Willow - C
- T47-50 - Hawthorn - C
- T51 - Ash - C
- T52 - Hawthorn - C
- T53 - Ash - C
- T54-55 - Hawthorn - C
- T56 - Crack Willow - C
- T57 - Wild Cherry - C
- T58 - Ash - C
- T60 - Oak - U
- T61 - Oak - B
- T65 - Sycamore - U
- T69 - Oak - A
- T70 - Oak - C
- T71-75 - Oak - B

- T76 - Oak - C
- T77-78 - Oak - C
- T79-80 - Oak - B
- T81 - Ash - C
- T83 - Ash - B
- T84 - Sycamore - C
- T85 - Oak - A
- T86 - Oak - C
- T86a/b - Oak - B
- T87 - Oak - C
- T88 - Oak - B
- T89 - Oak - B
- T90 - Oak - A
- T91-93 - Oak - B
- T94-95 - Whitebeam - C
- T96 - Elm - U
- T97 - Oak - B
- T98 - Whitebeam - U
- T99 - Sycamore - B
- T100-101 - Oak - B
- T102 - Ash - C
- T103 - Sycamore - C
- T103a - Oak - C
- T104 - Sycamore - C
- T105 - Sycamore - U
- T106 - Holly - C
- T107-111 - Lawson's Cypress - C
- T113 - Oak - C
- T114 - Oak - B
- T129 - Oak - B
- T130-131 - Sycamore - C
- T132 - Sycamore - B
- T133 - Oak - A
- T134 - Sycamore - U
- T135 - Sycamore - C
- T136 - Oak - B
- T137 - Sycamore - U
- T138 - Oak - A

- T139 - Goat Willow - C
- T140 - Oak - C
- T141 - Elm - C
- T142-143 - Oak - A
- T144 - Unknown - U
- T145 - Oak - A
- T146 - Sycamore - C
- T147 - Elm - C
- T148 - Sycamore - B
- T149 - Sycamore - C
- T150 - Oak - B
- T151 - Sycamore - B
- T152 - Sycamore - U
- T153 - Oak - A
- T154 - Oak - B
- T155 - Oak - C
- T156 - Sycamore - C
- T157 - Oak - A
- T158 - Oak - B
- T163 - Goat Willow - B
- T165-166 - Ash - C

5.2.5 The groups which would require removal to achieve the development are:

- G1 – Mixed – A
- G6 – Mixed – B
- G7 – Mixed – C
- G8-9 – Mixed – B
- G10 – Mixed – C
- G11 – Mixed – B
- G12 – Hawthorn and birch – C
- G13 – Mixed – B
- G14 – Mixed – C
- G17 (part) – Mixed – A
- G18 – Whitebeam and elm – C
- G19-20 – Shrubs – C
- G21 – Apple – C
- G22 (part) – Mixed – A
- G23 – Mixed - C

5.2.6 The hedges which would require removal to achieve the development are:

- H1-H37 – Hawthorn and mixed - C
- H38 (part) - Hawthorn - C
- H39 - Hawthorn, Ash, Sycamore - C

5.2.7 In addition to the trees to be felled to implement the scheme, it is proposed to fell the oak tree T38 with extensive stem bark browsing damage. Alternatively, this tree could be cut at 7m and retained as a monolith deadwood habitat feature within the retained woodland. T22 is a dead tree recommended for felling, however, this lies offsite.

5.3. IMPACTS ON RETAINED TREES

5.3.1 All of the retained trees on the site are located within the two gully woodlands G17 and G22. In most locations, the proposed earthworks will take place at least 1m beyond the canopy spread of the woodland and are unlikely to affect it, subject to adequate protection during construction. In several locations the earthworks extend close to or within the canopy spread of the southern woodland G17. It is recommended that the tree survey is extended to survey additional individual trees on the edge of this woodland to determine the extent of intrusion into the trees' RPA before earthwork details are finalised. A decision should be made at this stage on whether the earthworks and associated land drainage details can be amended to avoid impacting on the trees, or whether additional trees require removal.

5.3.2 Earthworks close to the boundaries will also impact on the retained onsite trees oak T167 and field maple T168, and the offsite rowan, ash and birch trees T4, T59, T126 and T164. These trees will all be affected by either cut or fill operations within their RPAs. The cut operations will sever roots, but the fill operations are likely to also sever roots as they will require prior topsoil stripping and land drains are proposed at the base of the filled embankments. The root severance and soil damage is likely to impact on the trees' health and could destabilise the trees where it takes place close to the trunk. It is recommended that earthworks are reconsidered prior to construction to determine if it is possible to amend them to avoid or reduce impacts on the trees.

5.3.3 It is proposed to layer a number of drains and a ditch through the retained woodlands G17 and G22 to create surface water outfalls into the becks. It is assumed that these outfalls will require headwall at the becks. These drains and headwalls will require tree felling, and may impact on retained trees where excavation takes place in their RPAs. It is recommended that the tree survey is extended to survey additional individual trees on the route of the drains and ditch to assess the impact on the trees before drainage details are finalised. A decision should be made at this stage on which trees require removal and whether the surface water drainage details can be amended to avoid impacting on trees of high and moderate quality (A and B category) trees. It may also be possible to reduce impacts on retained trees through the use of hand-dug or trenchless installation, but this would require confirmation.

5.3.4 It is proposed to construct a number of paths through the retained woodlands G17 and G22. It will be possible to construct these without significant impact on the retained trees if a permeable non-dig construction is used. It is proposed to use this path construction, which will be subject to further design. It is recommended that the paths are routed to avoid high and moderate quality (A and B category) trees, which would need to be identified by further survey of individual trees on the proposed path routes.

- 5.3.5 It is proposed to construct paths through the RPA of the retained onsite trees oak T167 and field maple T168, and the offsite ash and apple trees T3, T170 and T171. It is proposed to construct these without significant impact on the trees by use of permeable non-dig construction method. This will require further details, but typically includes use of a cellular confinement system sub-base laid on the existing ground surface with permeable fill and surfacing.
- 5.3.6 All other construction work, as shown on masterplan, will take place outside the RPA of retained trees and should not have an impact on these trees, subject to their protection during construction in accordance with the Method Statement (section 6) and the Tree Protection Plan. This protection should take the form of protective fencing to comply with BS5837: 2012, and monitoring by an arboriculturist during construction.

6.0 PRELIMINARY ARBORICULTURAL METHOD STATEMENT

6.1. INTRODUCTION

- 6.1.1 This document provides an Arboricultural Method Statement for proposed development of land west of Barnsley.
- 6.1.2 This is a preliminary method statement. The following details are required before it is finalised in advance of construction:
- Detailed design layout;
 - Final earthwork details;
 - Final drainage design;
 - Utility services; and
 - Location of the construction compound, storage and contractor parking.
- 6.1.3 This method statement is provided to identify suitable procedures and methodologies to ensure the protection of trees during site works. This method statement does not provide a detailed design or specification for works to and adjacent to trees. It also does not replace the requirement for contractors to prepare a method statement for health and safety purposes.

6.2. RESPONSIBILITIES FOR TREE PROTECTION

- 6.2.1 The Site Manager shall provide all sub-contractors with a copy of this method statement. Each sub-contractor shall be responsible for ensuring construction and tree protection in line with this method statement.
- 6.2.2 No alteration to the construction method or tree protection measures shall take place without the prior approval of the Site Manager and Arboricultural Consultant (see section 6.4).

6.3. PLANNING CONDITIONS

- 6.3.1 The LPA may impose requirements for tree protection through conditions on planning permission. The Site Manager should be familiar with, and comply with, planning conditions relating to tree protection.

6.4. SUPERVISION & MONITORING

- 6.4.1 The developer shall appoint an Arboricultural Consultant to monitor tree protection on the site. The Arboricultural Consultant shall visit the site at the following stages:
- Following the erection of the protective fencing;
 - During construction of the paths through retained woodland;
 - Every three months during the construction period; and
 - Following completion of the development and removal of protective fencing.

- 6.4.2 During each visit, the Arboricultural Consultant will ensure compliance with this method statement and provide a written monitoring report to the Site Manager. All reports will be made available to the LPA.
- 6.4.3 The Site Manager will notify the Arboricultural Consultant of all deviations from this method statement. In such cases, the consultant will visit the site and provide a written report.

6.5. KEY PERSONNEL & CONTACTS

- 6.5.1 Details on key personnel related to tree protection shall be entered below. This information shall be made available to the LPA prior to the commencement of works on the site.

	Name	Company/Authority	Contact Details
Project Manager			
Site Manager			
Arboricultural Consultant			
LPA Planning Officer			
LPA Arboricultural Officer			

6.6. ARBORICULTURAL WORKS - FELLING & PRUNING

- 6.6.1 Works to the trees are limited to those specified in the arboricultural works schedule (Appendix A). No other work shall take place without the approval of the appointed Arboricultural Consultant.
- 6.6.2 All arboricultural felling and pruning works will take place in advance of site construction works commencing.
- 6.6.3 All pruning will only be carried out in accordance with BS3998:2010 'Tree Work – Recommendations'¹². All arboricultural works will only be carried out by suitably experienced and competent arboricultural contractors.

6.7. PROTECTIVE FENCING

- 6.7.1 Protective fencing is required to protect the retained trees and hedges during the proposed works on site. Trees are easily damaged, or even killed, on a construction site and the protective fencing will be considered an important and integral part of the development. Protective fencing will be erected before any works take place on site.
- 6.7.2 Protective fencing will be erected in accordance with the Tree Protection Plan (Appendix E). The area formed contained by the protective fencing will be referred to as the construction exclusion zone.
- 6.7.3 The Tree Protection Plan includes a detail of the protective fencing to be used. The fence is to comply with BS582012 and is composed of 2.0m weld-mesh panels attached securely by wire or scaffold clamps to a scaffold framework. The scaffold framework shall comprise a vertical

¹² BS 3998:2010 *Tree Work – Recommendations*. British Standards Institute, 2010

and horizontal framework, well-braced against impact. Vertical tubes will be placed at a maximum spacing of 3.0m and driven at least 600mm into the ground.

6.7.4 Within the construction exclusion zone, all damaging operation will be excluded. In particular, the following activities must not take place within the construction exclusion zone:

- changes in levels;
- excavation;
- storage of materials (including soil and rubble);
- movement or parking of plant and vehicles;
- siting of site cabins or other temporary buildings;
- mixing of materials and chemicals; and
- disposal of liquids.

6.7.5 In addition to the above, no herbicides shall be applied within the construction exclusion zone without the consent of the arboricultural consultant and no fires will be lit on the site.

6.7.6 Protective fencing shall remain intact for the full duration of the construction works on each path section. It shall be inspected daily by a competent person (reporting directly to the Site Manager) and any damage shall be made good immediately. If it is necessary to make any changes to its position or construction, then prior approval must be sought from the arboricultural consultant, who will inform the LPA.

6.8. WORKS COMPOUND & CONSTRUCTION ACCESS

6.8.1 Details are not currently available on the proposed location of the works compound, construction storage or contractors parking. The Arboricultural Consultant should be consulted on the proposed location and this method statement will be revised once these details are available.

6.9. EARTHWORK DETAILS

6.9.1 Final earthwork details will be developed in consultation with the Arboricultural Consultant following additional tree survey and this method statement will be revised once these details are available.

6.10. DRAINAGE DETAILS

6.10.1 Final drainage details will be developed in consultation with the Arboricultural Consultant following additional tree survey and this method statement will be revised once these details are available.

6.11. UTILITY SERVICES

6.11.1 Details are not currently available on the proposed routing of utility services. The Arboricultural Consultant should be consulted on the proposed location and this method statement will be revised once these details are available.

6.12. PATH CONSTRUCTION

6.12.1 Proposed paths through the woodland G17 and G22, and within the RPA of retained boundary trees T3, T167, T168 and T171 shall be constructed using a permeable non-dig construction. This will use a cellular confinement system sub-base (Geosynthetics Cellweb or similar) laid on the existing ground surface with a permeable fill and surfacing. These paths will be subject to further design in liaison with the Arboricultural Consultant.

6.13. FURTHER INSPECTION

6.13.1 Trees on and immediately adjacent to the site will be inspected following the completion of construction to identify any further works required.

APPENDICES

APPENDIX A – TREE RETENTION & WORKS SCHEDULE

No.	Species	Latin Name	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread N (m)	Crown Spread E (m)	Crown Spread S (m)	Crown Spread W (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	RPA Radius (m)	RPA Area (m ²)
T1	Ash	<i>Fraxinus excelsior</i>	Semi-mature	Yes	25	7.0	2.0	2.0	2.0	2.0	2.0	Poor	Hedgerow tree. Suffering from chalara.	-	10-20	C1	3.00	28
T2	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	No	20 15 15 11	6.5	1.0	2.0	2.0	2.0	2.0	Fair	Growing intertwined with boundary fence.	-	20-40	C1	3.74	44
T3	Ash	<i>Fraxinus excelsior</i>	Mature	Yes	85	15.0	3.0	5.0	5.0	6.0	5.0	Poor	Growing immediately adjacent to the boundary of a private garden. Previously topped at ~7m. Growing on and new growth becoming heavy. Rot holes and evidence of cavity in lower stem. Ownership unclear.	Establish ownership. Repollard trees, cutting to former pollard points. Repollard thereafter on a 5 year cycle. Establish ownership before work.	10-20	C1	10.20	327
T4	Rowan	<i>Sorbus aucuparia</i>	Mature	Yes	45	8.0	1.5	3.0	3.0	3.0	2.0	Fair	Located off-site in a private garden.	-	10-20	C1	5.40	92
T5	English Oak	<i>Quercus robur</i>	Semi-mature	Yes	22 21 18 10	9.0	0.5	2.0	3.0	3.0	3.0	Fair	Multi-stemmed oak tree on top of motorway embankment.	-	>40	C1	4.41	61
T6	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	62	13.0	2.0	5.5	5.0	5.0	5.5	Poor	Suffering from chalara. Associated branch dieback.	-	10-20	C1	7.44	174
T7	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	No	24 22 19 17 15	6.0	2.0	3.0	3.0	3.0	3.0	Fair	Multi-stemmed hawthorn.	-	20-40	C1	5.28	88
T8	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	61	N/A	N/A	N/A	N/A	N/A	N/A	Dead	Dead tree collapsed.	Remove collapsed tree stem if site developed.	0	U	N/A	N/A
T9	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	40 21 20 20 15	7.5	0.5	5.0	6.5	6.0	4.0	Fair	Multi-stemmed tree of poor form. Possibly an old hedging pleacher.	-	>40	C1	6.64	139
T10	Ash	<i>Fraxinus excelsior</i>	Semi-mature	No	36	10.0	1.0	4.0	3.0	4.0	4.0	Poor	Suffering from chalara. Associated early dieback.	-	10-20	C1	4.32	59
T11	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	37 21	7.5	1.0	2.0	3.0	3.5	6.0	Fair	Decay cavities evident. Poor form.	-	20-40	C1	5.11	82
T12	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	40 29	9.0	1.0	4.0	5.0	4.0	4.0	Fair	Twin leaders from the ground.	-	10-20	C1	5.93	110
T13	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	79	12.0	3.0	4.0	5.0	6.0	6.0	Poor	A number of tear outs and wounds. Suffering from chalara. Associated low crown vigour.	-	10-20	C1	9.48	282

No.	Species	Latin Name	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread N (m)	Crown Spread E (m)	Crown Spread S (m)	Crown Spread W (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	RPA Radius (m)	RPA Area (m ²)
T14	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	44	11.0	3.0	5.0	6.0	5.0	7.0	Poor	Poor form with twin leaders from 0.5m. Decay fungus <i>Inonotus hispidus</i> present throughout.	-	10-20	C1	5.28	88
T15	Ash	<i>Fraxinus excelsior</i>	Semi-mature	Yes	23	6.0	1.5	3.5	3.5	3.5	3.5	Fair	Motorway embankment tree.	-	>40	C1	2.76	24
T16	Ash	<i>Fraxinus excelsior</i>	Semi-mature	Yes	28	9.0	2.0	4.5	4.5	4.5	4.5	Poor	Motorway embankment tree. Suffering from chalaras.	-	10-20	C1	3.36	35
T17	Ash	<i>Fraxinus excelsior</i>	Semi-mature	Yes	28 20	10.0	1.0	4.5	4.5	4.5	4.5	Poor	Motorway embankment tree. Suffering from chalaras.	-	10-20	C1	4.13	54
T18	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	No	27 25 21 19	4.5	2.0	4.0	3.0	2.0	3.0	Fair	-	-	20-40	C1	5.57	98
T19	Hawthorn	<i>Crataegus monogyna</i>	Mature	No	40	4.5	2.0	4.0	3.0	3.0	3.0	Fair	-	-	20-40	C1	4.80	72
T20	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	66	11.0	2.5	7.0	7.0	8.0	8.0	Good	Well formed and vigorous sessile oak growing in a split level field boundary of approximately 0.7m.	-	>40	A1	7.92	197
T21	English Oak	<i>Quercus robur</i>	Early-mature	No	76	11.0	2.0	9.0	6.5	9.0	6.0	Very Poor	Decayed stem. Close to failure. Not suitable for retention close to development.	Fell tree. Alternatively, cut at 6m and retain as a monolith habitat feature if to be located in informal open space.	<10	U	9.12	261
T22	Crack Willow	<i>Salix fragilis</i>	Early-mature	Yes	65	11.0	2.0	7.0	4.0	6.0	7.5	Dead	Dead tree located offsite adjacent to boundary.	Recommended felling offsite tree.	0	U	7.80	191
T23	Beech	<i>Fagus sylvatica</i>	Mature	No	108	N/A	N/A	N/A	N/A	N/A	N/A	Dead	Fallen tree with stem remaining. Previously recommended for felling in 2018 survey.	Remove collapsed tree stem if site developed.	0	U	N/A	N/A
T24	Beech	<i>Fagus sylvatica</i>	Mature	No	110	19.0	3.0	5.0	12.0	7.0	9.5	Fair	Fibre buckling or reactive growth at base likely to be indicative of decay. Further investigation necessary. Tree exposed by recent collapse of neighbouring beech tree.	Carry out further investigation of potential basal decay to determine the extent and implications of decay, and the suitability of retention in context of development. Retention category provisional.	20-40	B3	13.20	547

No.	Species	Latin Name	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread N (m)	Crown Spread E (m)	Crown Spread S (m)	Crown Spread W (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	RPA Radius (m)	RPA Area (m ²)
T25	Beech	<i>Fagus sylvatica</i>	Mature	No	114	14.0	2.0	7.0	5.0	3.0	5.0	Very Poor	Crown distortion caused by proximity of neighbouring dominant tree. Extensive decay cavity up to at least 3.5m.	Fell tree. Alternatively, cut at 6m and retain as a monolith habitat feature if to be located in informal open space.	<10	U	13.68	588
T26	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	No	8-22*6	9.0	2.0	4.5	2.0	2.0	4.5	Fair	-	-	20-40	C1	4.41	61
T27	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	Yes	11-26*6 22 21 20 10	5.0	1.0	3.0	3.0	3.0	3.0	Fair	-	-	20-40	C1	5.44	93
T28	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	No	21	6.0	1.0	3.0	3.0	3.0	3.0	Good	Well-formed young oak.	-	>40	C1	2.52	20
T29	Sessile Oak	<i>Quercus petraea</i>	Mature	No	63 50	13.5	1.5	9.0	9.0	10.0	7.0	Fair	Two co-dominant stems from 0.5m. Ingrown with fence.	-	>40	B1	9.65	293
T30	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	No	63	10.0	2.0	8.0	4.0	8.0	7.0	Poor	Extensive browsing damage to base of stem. Early decay. No long term future.	-	10-20	C1	7.56	180
T31	Sessile Oak	<i>Quercus petraea</i>	Mature	No	93	16.0	1.0	9.0	11.0	12.5	9.0	Fair	Browsing has caused early decay cavity at base. Occlusion and vigour appear good. Consider management in context of development proposals.	-	20-40	B1	11.16	391
T32	Silver Birch	<i>Betula pendula</i>	Mature	No	42	14.5	3.0	4.0	5.0	5.0	4.5	Fair	-	-	20-40	C1	5.04	80
T33	Ash	<i>Fraxinus excelsior</i>	Mature	No	80 70	12.0	1.5	8.5	4.5	11.0	4.0	Poor	Twin stemmed from the ground. S stem is lateral in form and is decayed at the base. Suffering from chalara.	-	10-20	C1	12.76	511
T34	Ash	<i>Fraxinus excelsior</i>	Mature	No	77	16.0	2.0	5.0	6.0	7.0	7.0	Fair	Ingrown with fence.	-	20-40	B1	9.24	268
T35	Ash	<i>Fraxinus excelsior</i>	Semi-mature	No	42	14.0	1.5	4.0	5.0	4.0	4.5	Poor	Suffering from chalara infection.	-	10-20	C1	5.04	80
T36	Silver Birch	<i>Betula pendula</i>	Early-mature	No	34 25	13.0	2.5	6.0	5.5	4.0	4.0	Fair	Two co-dominant stems from 1m.	-	20-40	C1	5.06	81

No.	Species	Latin Name	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread N (m)	Crown Spread E (m)	Crown Spread S (m)	Crown Spread W (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	RPA Radius (m)	RPA Area (m ²)
T37	Silver Birch	<i>Betula pendula</i>	Early-mature	No	37	13.0	2.0	4.5	4.0	4.0	3.0	Fair	-	-	20-40	C1	4.44	62
T38	Sessile Oak	<i>Quercus petraea</i>	Mature	No	92	16.0	2.0	8.0	8.0	8.0	9.0	Very Poor	Browsing at base extends to 50% of circumference. Decay present. Extensive decay also visible in secondary leader between 6m and 9m.	Fell tree if site developed. Alternatively, cut at 7m and retain as a monolith habitat feature if to be located in informal open space.	<10	U	11.04	383
T39	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	No	43	13.0	1.0	2.0	5.0	5.0	7.0	Fair	Self set tree abutting stone bridge. Poor quality.	-	20-40	C1	5.16	84
T40	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	No	52 31 24	15.0	3.0	4.0	6.0	5.0	6.5	Poor	Multi-stemmed from the ground. Browsing damage and decay.	-	20-40	C1	7.81	192
T41	English Oak	<i>Quercus robur</i>	Early-mature	No	83	16.0	1.0	6.0	8.0	7.0	9.0	Poor	Browsing damage and decay at base.	-	10-20	C1	9.96	312
T42	Sessile Oak	<i>Quercus petraea</i>	Mature	No	76	17.0	4.0	3.0	8.5	7.5	8.0	Good	Growing on steep bank. Some deadwood visible in crown.	-	>40	A1	9.12	261
T43	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	Yes	20 10 10 10	5.0	1.0	1.5	1.5	1.5	1.5	Fair	-	-	20-40	C1	3.17	32
T44	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	Yes	20 10 10 10	6.0	1.0	2.0	2.0	2.0	2.0	Fair	-	-	20-40	C1	3.17	32
T45	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	No	21 19 18 9 9	8.0	1.0	3.0	3.0	3.0	3.0	Fair	Multi-stemmed from the ground.	-	20-40	C1	4.31	58
T46	Goat Willow	<i>Salix caprea</i>	Semi-mature	No	8- 23*10	8.0	1.0	4.0	4.0	4.0	4.0	Fair	Multi-stemmed from the ground.	-	20-40	C1	5.88	109
T47	Hawthorn	<i>Crataegus monogyna</i>	Young	Yes	10	3.0	0.5	1.0	1.0	1.0	1.0	Fair	-	-	20-40	C1	1.20	5
T48	Hawthorn	<i>Crataegus monogyna</i>	Young	Yes	10	3.0	0.5	1.0	1.0	1.0	1.0	Fair	-	-	20-40	C1	1.20	5
T49	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	Yes	20 10 10	5.0	0.5	3.0	3.0	2.0	2.0	Fair	-	-	20-40	C1	2.94	27
T50	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	Yes	10 10 10 10	3.0	1.0	2.0	1.5	2.0	1.5	Fair	Multi-stemmed from the ground.	-	20-40	C1	2.40	18
T51	Ash	<i>Fraxinus excelsior</i>	Semi-mature	No	25 23	7.0	1.0	3.0	3.0	2.0	2.0	Fair	Two stems from ground level.	-	20-40	C1	4.08	52
T52	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	Yes	19 18 10 10	5.0	0.5	3.0	3.0	2.0	2.0	Fair	-	-	20-40	C1	3.57	40

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T53	Ash	<i>Fraxinus excelsior</i>	Semi-mature	No	14 12 10 10 10	8.0	0.5	2.5	2.5	2.0	2.0	Fair	Multi-stemmed from the ground.	-	20-40	C1	3.04	29
T54	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	Yes	11 10 10 10 10	4.5	0.5	2.0	2.0	2.0	1.0	Fair	-	-	20-40	C1	2.74	24
T55	Hawthorn	<i>Crataegus monogyna</i>	Semi-mature	Yes	15 10 10 10	4.5	1.0	2.0	2.0	1.0	1.0	Fair	Multi-stemmed from the ground.	-	20-40	C1	2.75	24
T56	Crack Willow	<i>Salix fragilis</i>	Early-mature	No	48 34	9.5	2.0	6.0	8.0	7.0	6.0	Fair	Previously topped at 2m and 4m. Growing on.	-	20-40	C1	7.06	157
T57	Wild Cherry	<i>Prunus avium</i>	Semi-mature	Yes	33 23	8.0	1.0	3.0	4.0	5.0	2.0	Fair	-	-	20-40	C1	4.83	73
T58	Ash	<i>Fraxinus excelsior</i>	Early-mature	Yes	70	12.5	2.0	6.0	6.0	7.0	6.0	Poor	Ash tree in grown on hedgerow. Some torn out limbs and scarring vindictive of Inonotus hispidus infection. Suffering from chalaras.	-	10-20	C1	8.40	222
T59	Ash	<i>Fraxinus excelsior</i>	Early-mature	Yes	70	16.0	2.0	7.0	7.0	7.0	7.0	Fair	Early mature tree growing on the edge of a woodland group beyond site boundary.	-	20-40	B1	8.40	222
T60	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	72	14.0	1.0	8.0	7.0	8.5	8.0	Very Poor	A third crown collapsed due to split at main fork at 2m. Large tear out wound. Remaining crown supported by weak fork at risk of further collapse.	Fell tree.	<10	U	8.64	235
T61	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	61	15.0	1.0	7.0	7.0	8.0	7.0	Fair	Vertical crack with early decay in stem.	-	20-40	B1	7.32	168
T62	Sessile Oak	<i>Quercus petraea</i>	Mature	Yes	80	17.0	3.0	8.0	8.0	10.0	8.0	Good	Located beyond site boundary. Inspected at distance.	-	>40	A1	9.60	290
T63	Ash	<i>Fraxinus excelsior</i>	Early-mature	Yes	33 32 32 31 28	9.5	1.0	4.5	4.5	5.5	4.5	Poor	Multi-stemmed ash tree growing intertwined with school fence. Not reinspected as located offsite at significant distance from site boundary.	-	20-40	C1	8.38	221

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T64	Sessile Oak	<i>Quercus petraea</i>	Mature	No	95	18.0	4.0	7.0	7.0	10.0	10.0	Good	One of a number of high quality trees within woodland feature. Becoming ivy clad.	Remove ivy to assist future tree inspections.	>40	A1	11.40	408
T65	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	No	35 30	12.0	2.5	4.0	3.0	4.0	3.0	Very Poor	Stock browsing damage. Significant bark stem damage.	Fell tree if site developed.	<10	U	5.53	96
T66	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	58	15.0	2.0	6.0	8.0	5.0	7.0	Good	Good tree as part of high quality group.	-	>40	B1	6.96	152
T67	Sessile Oak	<i>Quercus petraea</i>	Mature	No	51	15.0	4.0	7.0	8.0	8.0	6.0	Good	-	-	>40	A1	6.12	118
T68	Wych Elm	<i>Ulmus glabra</i>	Early-mature	No	52 40	19.0	5.0	6.0	7.0	4.0	6.0	Good	-	-	20-40	B1	7.87	195
T69	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	70	15.0	3.0	5.0	7.0	6.0	4.0	Good	Roadside tree on top of embankment. Quality oak.	-	>40	A1	8.40	222
T70	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	No	26 22 20 16	14.0	8.0	6.0	5.0	4.0	1.0	Fair	Roadside tree on top of embankment. Multi-stemmed poor form. One stem removed from base.	-	>40	C1	5.11	82
T71	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	41 36	15.0	3.0	7.0	3.0	6.0	4.0	Fair	Roadside tree on top of embankment. Multi-stemmed from the ground.	-	>40	B1	6.55	135
T72	Sessile Oak	<i>Quercus petraea</i>	Early-mature	Yes	48	14.0	2.5	6.0	3.0	6.0	4.0	Good	Roadside tree on top of embankment. Well formed tree of good potential.	-	>40	B1	5.76	104
T73	Sessile Oak	<i>Quercus petraea</i>	Early-mature	Yes	50	12.0	2.5	1.0	6.0	3.0	2.0	Fair	Roadside tree on top of embankment.	-	>40	B1	6.00	113
T74	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	Yes	38	12.0	3.0	3.0	3.0	3.0	2.0	Fair	Roadside tree on top of embankment. Ivy clad.	Sever ivy at base.	>40	B1	4.56	65
T75	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	39 35 33	14.0	2.5	6.0	2.0	6.0	5.0	Fair	Roadside tree on top of embankment. Multi-stemmed from the ground. Wound on roadside stem.	-	>40	B1	7.43	173
T76	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	No	41	12.0	3.0	2.0	1.0	3.0	5.0	Fair	Roadside tree on top of embankment. Crown formation affected by proximity to adjacent tree.	-	>40	C1	4.92	76

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T77	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	Yes	36	16.0	2.0	5.0	2.0	5.0	2.0	Good	Roadside tree on top of embankment. Suppressed by proximity to neighbouring trees. Ivy clad.	Sever ivy at base.	10-20	C1	4.32	59
T78	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	Yes	32	15.0	3.0	5.0	2.0	4.0	2.0	Fair	Roadside tree on top of embankment. Ivy clad.	Sever ivy at the base.	20-40	C1	3.84	46
T79	Sessile Oak	<i>Quercus petraea</i>	Early-mature	Yes	48 41	15.0	2.0	7.0	4.0	6.0	2.0	Fair	Roadside tree on top of embankment. Twin stemmed from the ground. Ivy clad.	Sever ivy at base.	>40	B1	7.58	180
T80	Sessile Oak	<i>Quercus petraea</i>	Early-mature	Yes	28 28	15.0	2.0	7.0	3.0	6.0	4.0	Fair	Roadside tree on top of embankment. Ivy clad.	Sever ivy at base.	>40	B1	4.75	71
T81	Ash	<i>Fraxinus excelsior</i>	Early-mature	Yes	29 27 26 23	15.0	1.5	4.0	5.0	5.0	5.0	Poor	Roadside tree on top of embankment. Multi-stemmed from the ground. Ivy clad. Suffering from ash dieback. Associated heavy fruiting.	Sever ivy at base.	20-40	C1	6.32	126
T82													Tree not present.	-				
T83	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	54	11.0	2.0	5.0	5.0	5.0	3.0	Fair	Roadside tree on top of embankment. Potential chalara infection. Monitor.	-	20-40	B1	6.48	132
T84	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	Yes	30 28 18	16.0	1.0	5.0	5.5	5.5	2.0	Poor	Roadside tree on top of embankment. Multi-stemmed with extensive epicormic. Impact wounds on roadside stem.	-	10-20	C1	5.38	91
T85	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	80	14.0	1.5	7.0	6.0	7.0	7.0	Good	Roadside tree on top of embankment. Quality oak.	-	>40	A1	9.60	290
T86	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	No	38	12.0	2.0	5.5	2.0	2.0	4.0	Fair	Roadside tree on top of embankment. Suppressed by proximity to neighbouring trees.	-	20-40	C1	4.56	65
T86a	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	44	12.0	3.0	5.0	4.0	3.0	3.0	Fair	Roadside tree on top of embankment. Decay in secondary stem at 2m.	-	>40	B1	5.28	88

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T86b	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	No	32	12.0	1.0	0.0	2.0	7.0	2.0	Fair	Roadside tree on top of embankment. Leans towards road.	-	>40	B1	3.84	46
T87	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	53	6.0	3.5	5.0	1.0	1.0	2.0	Poor	Roadside tree on top of embankment. Dieback of crown to fork at 4m. Single live branch over field.	-	10-20	C1	6.36	127
T88	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	39	12.0	2.5	4.0	3.0	3.0	2.0	Fair	Roadside tree on top of embankment.	-	>40	B1	4.68	69
T89	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	59	15.0	2.5	7.0	6.0	6.0	8.0	Good	Roadside tree on top of embankment.	-	>40	B1	7.08	157
T90	Sessile Oak	<i>Quercus petraea</i>	Mature	No	86	14.0	2.5	6.0	8.0	8.0	8.0	Good	Roadside tree. Minor deadwood and stubs.	-	>40	A1	10.32	335
T91	Sessile Oak	<i>Quercus petraea</i>	Mature	No	81	11.5	2.5	6.0	6.0	6.0	6.0	Fair	Roadside tree. Top and branch at 8m have snapped out. Top still hung up and close to road. Potential hazard.	Remove snapped out top.	>40	B1	9.72	297
T92	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	No	36	6.0	2.5	4.0	2.5	3.0	4.0	Fair	Roadside tree with good potential.	-	>40	B1	4.32	59
T93	Sessile Oak	<i>Quercus petraea</i>	Mature	Yes	78	11.0	2.5	6.5	6.0	6.0	6.0	Fair	Roadside tree. Ivy and hedges restricts. Some minor deadwood in crown.	Sever ivy prior to future inspections.	>40	B1	9.36	275
T94	Whitebeam	<i>Sorbus aria</i>	Mature	No	32 29 22	9.0	1.0	5.0	5.0	5.0	5.0	Fair	Ivy clad. Situated on woodland edge.	-	20-40	C1	5.82	106
T95	Whitebeam	<i>Sorbus aria</i>	Early-mature	No	32	8.0	1.0	4.0	4.0	4.0	3.0	Fair	Ivy clad. Edge of woodland group.	Remove ivy prior to future inspections.	20-40	C1	3.84	46
T96	Wych Elm	<i>Ulmus glabra</i>	Early-mature	No	36	9.0	1.0	5.0	5.0	5.0	5.0	Very Poor	On edge of woodland group. Suffering from Dutch elm disease and almost certainly will be killed.	Fell tree.	<10	U	4.32	59
T97	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	50	14.0	2.0	0.0	6.0	8.0	2.0	Good	One of many better quality trees within woodland group. Growing with a crown bias due to group pressure.	-	>40	B2	6.00	113

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T98	Whitebeam	<i>Sorbus aria</i>	Mature	No	31 26 22 20	11.0	1.0	2.0	3.0	3.0	3.0	Very Poor	Tree on edge of woodland group. Three stems dead. Tree in terminal decline.	Fell tree.	<10	U	6.03	114
T99	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature	No	48	14.5	4.0	4.0	4.0	5.0	4.0	Good	One of a number of better trees within woodland group.	-	>40	B2	5.76	104
T100	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	48	13.0	2.0	2.0	2.5	7.0	5.0	Fair	One of a number of better trees within woodland group. N limb at 4m is snapped off.	-	>40	B2	5.76	104
T101	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	63	15.0	2.0	3.0	3.5	9.5	7.0	Good	One of a number of better trees within woodland feature.	-	>40	B2	7.56	180
T102	Ash	<i>Fraxinus excelsior</i>	Semi-mature	No	32 29	10.0	1.0	2.0	3.0	4.0	6.0	Fair	-	-	>40	C1	5.18	84
T103	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	Yes	23 22 16	9.0	2.0	3.0	3.0	2.0	2.0	Fair	Multi-stemmed tree in hedgerow.	-	>40	C1	4.27	57
T103a	Sessile Oak	<i>Quercus petraea</i>	Semi-mature	Yes	28	5.5	3.5	2.5	3.0	2.5	2.5	Good	Tree in hedgerow.	-	>40	C2	3.36	35
T104	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	No	19 12 10	8.0	1.0	2.0	2.0	2.0	2.0	Fair	Multi-stemmed hedgerow tree.	-	>40	C1	2.95	27
T105	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	Yes	18 16 15 15 13	2.0	N/A	0.0	0.0	0.0	0.0	Dead	Stump cut at 2m.	-	0	U	4.16	54
T106	Variiegated Holly	<i>Ilex sp.</i>	Semi-mature	Yes	10 10	2.5	0.5	1.5	1.5	1.5	1.5	Fair	Trimmed.	-	20-40	C1	1.70	9
T107	Lawson's Cypress	<i>Chamaecyparis lawsoniana</i>	Young	Yes	10	2.0	0.5	0.5	0.5	0.5	0.5	Fair	Trimmed.	-	20-40	C1	1.20	5
T108	Lawson's Cypress	<i>Chamaecyparis lawsoniana</i>	Young	Yes	10	2.0	0.5	0.5	0.5	0.5	0.5	Fair	Trimmed.	-	20-40	C1	1.20	5
T109	Lawson's Cypress	<i>Chamaecyparis lawsoniana</i>	Young	Yes	10	2.0	0.5	0.5	0.5	0.5	0.5	Fair	Trimmed.	-	20-40	C1	1.20	5
T110	Lawson's Cypress	<i>Chamaecyparis lawsoniana</i>	Early-mature	No	36	12.0	1.0	3.0	3.0	3.0	3.0	Fair	-	-	20-40	C1	4.32	59

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T111	Lawson's Cypress	<i>Chamaecyparis lawsoniana</i>	Early-mature	No	40	12.0	1.0	3.0	3.0	3.0	3.0	Fair	-	-	20-40	C1	4.80	72
T112													Tree removed.	-				
T113	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	80	11.0	3.0	6.0	6.5	6.5	7.0	Poor	Stock bark browsing and poached roots. Decay and major deadwood in crown.	-	10-20	C1	9.60	290
T114	Sessile Oak	<i>Quercus petraea</i>	Mature	No	70	16.0	3.0	8.0	8.0	10.5	8.0	Fair	Large tear out wound at 7m. Woodpecker hole at 5m. Sunken bark patch 2m above. Potential stem decay.	Carry out further investigation of potential basal decay to determine the extent and implications of decay if site developed and tree retained.	20-40	B2	8.40	222
T115	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	49	13.0	3.0	2.0	5.5	5.5	7.0	Fair	Part of high quality group.	-	>40	A2	5.88	109
T116	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	62	14.0	2.0	7.0	7.0	2.0	10.0	Good	Part of high quality group.	-	>40	A2	7.44	174
T117	Sessile Oak	<i>Quercus petraea</i>	Mature	No	60	16.0	2.0	2.0	4.0	8.0	7.5	Fair	Early decay cavity at base. Part of high quality group.	-	20-40	B2	7.20	163
T118	Sessile Oak	<i>Quercus petraea</i>	Mature	No	81	16.0	2.0	6.0	12.0	12.5	6.0	Fair	Part of high quality group. Browsing damage at base. Shattered branch stub.	-	20-40	B2	9.72	297
T119	Sessile Oak	<i>Quercus petraea</i>	Early-mature	No	72	15.0	2.5	9.0	3.0	10.5	9.0	Good	Part of high quality group.	-	>40	A2	8.64	235
T120	Sessile Oak	<i>Quercus petraea</i>	Mature	No	64	15.0	2.5	8.0	9.0	10.5	9.0	Good	Part of high quality group.	-	>40	A2	7.68	185
T121	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	47	14.0	2.0	3.0	4.0	8.0	5.0	Fair	Part of high quality group.	-	>40	B2	5.64	100
T122	Hawthorn	<i>Crataegus monogyna</i>	Early-mature	No	20	4.0	1.5	1.0	2.0	2.0	1.0	Poor	Browsing damage.	-	10-20	C1	2.40	18
T123	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	54	15.0	2.0	6.0	3.0	7.0	3.0	Poor	Part of high quality group. Browsing damage to roots. Suffering from chalaras.	-	10-20	C1	6.48	132
T124	Ash	<i>Fraxinus excelsior</i>	Early-mature	No	46	14.0	3.0	3.0	3.0	8.0	3.0	Poor	Decay cavity in stem.	-	10-20	C1	5.52	96

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T125	Sessile Oak	<i>Quercus petraea</i>	Mature	No	91	17.0	3.0	10.0	10.0	11.0	10.0	Fair	Part of high quality group. Bleeding cankers on stem.	-	>40	A2	10.92	375
T126	Ash	<i>Fraxinus excelsior</i>	Mature	Yes	80 70 60	16.0	3.0	10.0	8.0	8.0	6.0	Fair	Located off-site in a private garden. Viewed from a distance and inspection obscured by vegetation.	-	20-40	B1	14.65	674
T127	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature	Yes	45	11.0	1.0	5.0	6.0	6.0	4.0	Good	Located off-site in a private garden. Viewed from a distance and inspection obscured by vegetation.	-	>40	B1	5.40	92
T128	Hawthorn	<i>Crataegus monogyna</i>	Mature		25 20 15 14	6.0	1.0	3.0	2.5	2.5	2.5	Poor	Located on boundary. Browsing damage.	-	10-20	C1	4.56	65
T129	Sessile Oak	<i>Quercus petraea</i>	Early-mature		41	14.0	2.0	4.0	2.0	3.0	7.0	Good	Well formed tree of good potential.	-	>40	B1	4.92	76
T130	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature		35	14.0	5.0	3.0	2.0	3.0	4.0	Fair	-	-	>40	C1	4.20	55
T131	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature		46	14.0	3.0	8.0	3.0	2.0	7.0	Fair	Growing with a bias to the N. Poor form. Minor dieback in crown.	-	>40	C1	5.52	96
T132	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature		36	16.0	6.0	4.0	2.0	4.0	3.0	Fair	Crown formation affected by proximity to dominant tree.	-	20-40	B1	4.32	59
T133	English Oak	<i>Quercus robur</i>	Early-mature		40	17.0	3.0	5.0	2.0	6.0	5.0	Good	Well formed with good potential. Locally dominant.	-	>40	A1	4.80	72
T134	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature		44 41 38 37 25	12.5	4.0	5.0	3.0	3.0	6.0	Very Poor	Multi-stemmed. Likely to be a grown on stump. Almost dead.	Fell tree.	<10	U	10.08	319
T135	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature		25 23	11.0	2.0	4.0	1.0	2.0	4.0	Poor	Multi-stemmed from the ground. Probable grown on stump. Crown bias and crack in larger stem. Poor specimen.	-	10-20	C1	4.08	52
T136	Sessile Oak	<i>Quercus petraea</i>	Early-mature		57	15.0	4.0	7.0	2.0	4.0	6.0	Good	One of the better trees in a high quality group. Growth affected by group pressure.	-	>40	B2	6.84	147

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T137	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature		34	13.0	4.0	2.0	3.0	3.0	3.0	Very Poor	Significant crown dieback and major deadwood. In terminal decline.	Fell tree.	<10	U	4.08	52
T138	Sessile Oak	<i>Quercus petraea</i>	Early-mature		55	16.0	3.0	7.0	4.0	4.0	8.0	Good	Well formed tree of good potential. Dominant. Concrete dumped at base.	Remove concrete from base.	>40	A1	6.60	137
T139	Goat Willow	<i>Salix caprea</i>	Semi-mature		24 23	9.0	1.0	4.0	1.0	2.0	4.0	Fair	Poor form	-	20-40	C1	3.99	50
T140	Sessile Oak	<i>Quercus petraea</i>	Semi-mature		12	10.0	3.0	2.0	2.0	2.0	2.0	Good	Young vigorous tree. Well formed and good potential.	-	>40	C1	1.44	7
T141	Wych Elm	<i>Ulmus glabra</i>	Semi-mature		32 20 11 9 9	13.0	1.0	4.0	3.0	4.0	6.0	Fair	-	-	20-40	C1	4.96	77
T142	Sessile Oak	<i>Quercus petraea</i>	Early-mature		48	16.0	4.0	4.0	6.0	4.0	4.0	Good	Well formed tree in quality group. Becoming ivy clad.	Remove ivy.	>40	A2	5.76	104
T143	Sessile Oak	<i>Quercus petraea</i>	Early-mature		54	14.0	2.0	4.0	3.0	5.0	4.0	Good	Well formed tree in quality group. Becoming ivy clad.	Remove ivy.	>40	A2	6.48	132
T144	Unknown		Late-mature		40	6.0	N/A	0.0	0.0	0.0	0.0	Dead	Dead tree hung up in neighbour.	Fell tree.	0	U	4.80	72
T145	Sessile Oak	<i>Quercus petraea</i>	Early-mature		58	16.0	4.0	6.0	5.0	5.0	5.0	Good	Well formed tree in quality group. Becoming ivy clad.	Remove ivy.	>40	A2	6.96	152
T146	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature		42	12.0	2.0	2.0	4.0	2.0	1.0	Poor	Dieback in crown. Ivy clad.	-	10-20	C1	5.04	80
T147	Wych Elm	<i>Ulmus glabra</i>	Semi-mature		33 13	10.0	1.0	3.0	3.0	3.0	3.0	Fair	-	-	20-40	C1	4.26	57
T148	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature		46	13.0	3.0	3.0	4.0	3.0	2.0	Fair	Ivy clad.	-	>40	B2	5.52	96
T149	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature		27	10.0	1.0	3.0	4.0	3.0	2.0	Fair	Supressed tree.	-	>40	C1	3.24	33
T150	Sessile Oak	<i>Quercus petraea</i>	Early-mature		59	14.0	3.0	5.0	8.0	4.0	2.0	Fair	Crown formation affected by proximity to dominant trees.	-	>40	B1	7.08	157

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T151	Sycamore	<i>Acer pseudoplatanus</i>	Early-mature		49	12.0	1.0	5.0	5.0	3.0	2.0	Fair	-	-	20-40	B1	5.88	109
T152	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature		33	11.0	3.0	2.0	2.0	2.0	2.0	Dead	Dead tree.	-	0	U	3.96	49
T153	Sessile Oak	<i>Quercus petraea</i>	Early-mature		55	17.0	3.0	6.0	6.0	5.0	6.0	Good	Well formed and dominant tree in high quality group.	-	>40	A1	6.60	137
T154	Sessile Oak	<i>Quercus petraea</i>	Early-mature		57	14.0	2.0	8.0	2.5	0.0	4.0	Fair	Crown formation affected by proximity to dominant tree.	-	20-40	B1	6.84	147
T155	Sessile Oak	<i>Quercus petraea</i>	Early-mature		37	10.0	2.0	8.0	2.0	0.0	3.0	Poor	Crown formation affected by proximity to dominant tree. Decay at base of stem.	-	10-20	C1	4.44	62
T156	Sycamore	<i>Acer pseudoplatanus</i>	Semi-mature		28 15	13.0	3.0	5.0	3.0	1.0	2.0	Fair	-	-	20-40	C1	3.81	46
T157	Sessile Oak	<i>Quercus petraea</i>	Early-mature		56	15.0	7.0	7.0	6.0	4.0	7.0	Good	Well formed and dominant tree in good quality group.	-	>40	A1	6.72	142
T158	Sessile Oak	<i>Quercus petraea</i>	Early-mature		51	13.0	4.0	4.0	3.0	3.0	2.0	Fair	Becoming suppressed by dominant neighbours.	-	20-40	B2	6.12	118
T159	Silver Birch	<i>Betula pendula</i>	Semi-mature	Yes	20	7.0	1.5	2.0	2.0	1.5	2.0	Fair	Located off-site in private garden.	-	10-20	C1	2.40	18
T160	Common Alder	<i>Alnus glutinosa</i>	Semi-mature	Yes	20	5.0	1.5	1.5	2.0	2.0	2.0	Fair	Located off-site in private garden.	-	20-40	C1	2.40	18
T161	Horse Chestnut	<i>Aesculus hippocastanum</i>	Semi-mature	Yes	15	5.0	1.5	1.5	1.5	1.5	1.5	Fair	Located off-site in private garden.	-	20-40	C1	1.80	10
T162	Goat Willow	<i>Salix caprea</i>	Semi-mature	Yes	25	6.0	1.0	2.0	2.0	2.0	1.5	Fair	Located off-site in private garden.	-	20-40	C1	3.00	28
T163	Goat Willow	<i>Salix caprea</i>	Early-mature	Yes	27 26 25 25 24	8.0	1.0	5.0	4.0	3.0	4.0	Fair	-	-	20-40	B1	6.82	146
T164	Silver Birch	<i>Betula pendula</i>	Semi-mature	Yes	35	8.0	2.0	3.0	3.0	3.0	3.0	Fair	Located off-site in private garden.	-	20-40	B1	4.20	55
T165	Ash	<i>Fraxinus excelsior</i>	Semi-mature	Yes	25-31*5	11.0	1.0	6.5	5.0	5.0	4.0	Poor	Cluster of stems in hedge line.	-	20-40	C1	7.51	177

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T166	Ash	<i>Fraxinus excelsior</i>	Semi-mature	Yes	16-26*6	12.0	3.0	4.0	5.0	4.0	3.0	Fair	Multi-stemmed tree in hedge line.	-	20-40	C1	6.17	120
T167	English Oak	<i>Quercus robur</i>	Early-mature	Yes	50	11.0	2.5	5.0	6.0	6.0	6.0	Good	Appears to be on-site in hedge line.	-	>40	B1	6.00	113
T168	Field Maple	<i>Acer campestre</i>	Early-mature	Yes	40	9.0	2.0	5.0	5.0	5.0	5.0	Good	On-site in hedge line.	On-site in hedge line.	>40	B1	4.80	72
T169	Ash	<i>Fraxinus excelsior</i>	Early-mature	Yes	75	14.0	3.0	7.0	9.0	8.0	6.0	Poor	Located in private garden. Viewed from a distance. Dimensions estimated. Extensive fruiting of the decay fungus <i>Inonotus hispidus</i> . Suffering from chalara.	-	10-20	C1	9.00	254
T170	Ash	<i>Fraxinus excelsior</i>	Mature	Yes	70 60	15.0	3.0	6.0	6.0	6.0	6.0	Fair	Located in private garden. Viewed from a distance and some dimensions estimated.	-	20-40	B1	11.06	385
T171	Apple	<i>Malus domestica</i>	Mature	Yes	40	7.0	1.5	5.0	5.0	5.0	5.0	Fair	-	-	20-40	C1	4.80	72

No.	Species	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	Root Protection Area
G1	Sessile Oak, Sycamore, Ash, Wych Elm, Hawthorn, Elder	Early mature	No	20-70	8-17	>1	4-8	Good; Fair; Poor	Roadside group of trees forming a small copse. Predominantly sessile oak with a row of whitebeam at the roadside (recorded as a separate group). Even-aged early-mature trees of very good potential. Fly tipping has taken place. Most trees recorded separately as individuals.	If retained fully survey in light of the development in order to assess risk and to inform a management plan for the enhancement of the woodland. Clear away fly tipped items and rubble.	>40	A2	Crown spread +1m
G2	Cherry Laurel	Mature	No	N/A	3-4	0	2	Good	Trimmed laurel hedge off-site in neighbouring property but bounding the survey area.	-	>40	B2	Crown spread +1m
G3	Hawthorn	Mature	No	N/A	2	0	1	Good	Trimmed hedge off-site in neighbouring property but bounding the survey area.	-	>40	B2	Crown spread +1m
G4	Hawthorn, Ash, Rowan, English Oak, Lime	Semi-mature	No	10-20	3-6	>0	2-4	Good; Fair	Motorway embankment vegetation. Scrubby in character. Adjoins taller plantation screening houses to SE.	-	>40	C2	Crown spread +1m
G5	Ash, Sycamore, Bird Cherry, Hawthorn	Semi-mature	No	10-30	6-12	>1	2-5	Fair	Motorway embankment plantation. Predominantly ash. Vulnerable to chalara dieback of ash.	-	>40	B2	Crown spread +1m
G6	Ash, Blackthorn, Field Maple, Common Alder, Sycamore, Hawthorn	Semi-mature	No	10-30	4-10	>0	2-5	Fair	Roadside plantation of mixed native species. Screening value. Predominantly ash. Vulnerable to chalara dieback of ash.	-	>40	B2	Crown spread +1m
G7	Hawthorn, Ash, Field Maple, Wild Cherry, Blackthorn	Semi-mature	No	10-30	3-7	>0	2-5	Fair	Scrubby mixed native species plantation on centre of bus turning circle.	-	>40	C2	Crown spread +1m
G8	Hawthorn, Field Maple, Ash, Rowan	Semi-mature	No	10-25	3-7	>0	2-5	Fair	Scrubby group of mixed natives screening bus turning circle.	-	>40	B2	Crown spread +1m
G9	Hawthorn, Ash	Semi-mature	No	10-30	4-8	>0	2-5	Fair; Poor	Grown on field hedge boundary at the edge of a residential road. Providing good screening. This hedge will be valuable to residents but is in generally poor condition and will require improvement if retained.	-	>40	B2	Crown spread +1m
G10	Hawthorn, Gorse, Ash, Elder	Early-mature	No	5-20	3-7	>0	2-4	Fair	Scrubby growth on a bank. Predominantly gorse in the southern extent. Browsed by ponies.	-	20-40	C2	Crown spread +1m
G11	Hawthorn, Ash, Sessile Oak, Hazel, Crab Apple,	Semi-mature; Early-mature	No	10-30	4-14	>0	2-5	Good; Fair	Copse in valley bottom lining beck.	-	>40	B2	Crown spread +1m
G12	Hawthorn, Silver Birch	Early-mature	No	15-35	4-14	>1	3-5	Fair; Poor	Old hedgerow and standard trees grown on to form row of trees. Heavily damaged by browsing.	-	20-40	C2	Crown spread +1m

No.	Species	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	Root Protection Area
G13	Ash, Silver Birch, Rowan, Sycamore, Domestic Apple	Early-mature	No	10-30	6-11	>1	2-5	Fair;Good	Plantation in the corner of the field. Useful screening.	-	>40	B2	Crown spread +1m
G14	Wild Cherry, Silver Birch, Norway Maple, Hawthorn	Young	No	10-18	3-7	>1	2-5	Fair	Small plantation including wild cherry regeneration.	-	>40	C2	Crown spread +1m
G15	Sessile Oak, Ash, Sycamore, Hazel, Hawthorn	Early-mature	Yes	20-70	6-20	>0	3-10	Good;Fair	An area of maturing trees on a hillside forming a woodland and providing screening for the school beyond. Individual trees within the wood may qualify as retention category A. Located offsite and inspected from boundary.	-	>40	A2	Crown spread +1m
G16	Leyland Cypress	Early-mature	Yes	15-35	4-12	1	2-4	Good;Fair	Leyland cypress hedge away from the site boundary. Located offsite and viewed from a distance.	-	>40	B2	Crown spread +1m
G17	Sessile Oak, Ash, Sycamore, Hawthorn, Field Maple, Hazel, Silver Birch, Elder, Holly, Blackthorn	Semi-mature;Early-mature	No	20-80	8-18	>0	3-10	Good;Fair	Predominantly oak woodland following a beck at the bottom of a steep sided gullet as it flows north. A high number of trees would qualify for the high quality retention category if surveyed as individuals. Browsing damage to a number of tree. Chalara dieback infection present. Some of the woodland located offsite and inspected from boundary.	If retained fully survey in light of the development in order to assess risk and to inform a management plan for the enhancement of the woodland located on-site.	>40	A2	Crown spread +1m
G18	Whitebeam, Wych Elm	Early-mature	No	10-35	5-11	>1	3-5	Fair	Row of predominantly whitebeam between the road and woodland edge. Multi-stemmed and ivy clad.	-	20-40	C2	Crown spread +1m
G19	Ornamental shrubs	Young	No	<10	0.5-1.5	0	1	Fair	-	-	10-20	C2	Crown spread +1m
G20	Ornamental shrubs	Early-mature	No	<10	0.5-1.5	0	1	Fair	-	-	10-20	C2	Crown spread +1m
G21	Apple	Semi-mature	No	10-15	1.5-2.5	1	2-4	Fair	Six semi-mature fruit trees.	-	10-20	C2	Crown spread +1m
G22	Sessile Oak, Common Alder, Ash, Hazel, Hawthorn, Goat Willow, Silver Birch, Downy Birch, Wych Elm, Bird Cherry, Field Maple, Crab Apple, Sycamore, Beech, Blackthorn	Early-mature	No	20-80	8-18	>0	3-10	Good;Fair	Predominantly oak woodland following a beck at the bottom of a steep sided gullet as it flows north. A high number of trees would qualify for the high quality retention category if surveyed as individuals. Group is subject to a woodland TPO. Some of woodland located offsite and inspected from boundary.	If retained fully survey in light of the development in order to assess risk and to inform a management plan for the enhancement of the woodland located on-site.	>40	A2	Crown spread +1m

No.	Species	Age	Measurements Estimated	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	Root Protection Area
G23	Hawthorn, Ash, Elder	Early-mature	No	15-35	5-8	1	2-5	Fair	A grown on hedge that contains a number of semi-mature ash trees.	-	20-40	C2	Crown spread +1m

No.	Species	Measurements Estimated	Age	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	Root Protection Area
H1	Hawthorn	No	Semi-mature	N/A	2.0	>0	1	Fair	Trimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H2	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H3	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H4	Hawthorn, Elder	No	Semi-mature	N/A	4-6	>0	2-4	Fair	Untrimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H5	Hawthorn	No	Semi-mature	N/A	2.0	>0	1	Fair	Trimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H6	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H7	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H8	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H9	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H10	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H11	Hawthorn, Elder	No	Semi-mature	N/A	3.5-4.5	>0	2-4 (3)	Fair	Untrimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H12	Hawthorn	No	Semi-mature	N/A	2.0	>0	1	Fair	Trimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H13	Hawthorn	No	Semi-mature	N/A	2-3.5	>0	1-1.5	Fair	Mostly untrimmed hawthorn field hedge. Gappy.	-	>40	C2	Crown spread +1m
H14	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4 (3)	Fair	Hawthorn field hedge.	-	>40	C2	Crown spread +1m
H15	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4 (3)	Fair	Hawthorn field hedge.	-	>40	C2	Crown spread +1m

No.	Species	Measurements Estimated	Age	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	Root Protection Area
H16	Hawthorn	No	Semi-mature	N/A	5-6	>0	2-3	Fair	Untrimmed hawthorn field hedge. Particularly gappy.	-	>40	C2	Crown spread +1m
H17	Hawthorn, Elder	No	Semi-mature	N/A	5-6	>0	2-3	Fair	Untrimmed hawthorn-dominated field hedge. Base browsed by stock.	-	>40	C2	Crown spread +1m
H18	Hawthorn	No	Semi-mature	N/A	2.0	>0	1	Fair	Trimmed Hawthorn field hedge.	-	>40	C2	Crown spread +1m
H19	Hawthorn	No	Semi-mature	N/A	5-6	>0	1-2	Fair	Untrimmed hawthorn field hedge. Base browsed by stock.	-	>40	C2	Crown spread +1m
H20	Hawthorn, Elder	No	Semi-mature	N/A	2.0	>0	1	Fair	Trimmed hawthorn-dominated field hedge. Base browsed by stock.	-	>40	C2	Crown spread +1m
H21	Hawthorn	No	Semi-mature	N/A	2.0	>0	2	Fair	Trimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H22	Hawthorn, Elder	No	Semi-mature	N/A	2.0	>0	1	Fair	Trimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H23	Hawthorn, Elder	No	Semi-mature	N/A	5-6	>0	2-4	Fair	Untrimmed hawthorn-dominated field hedge. Gappy.	-	>40	C2	Crown spread +1m
H24	Hawthorn, Whitebeam, Apple, Hazel	No	Semi-mature	N/A	2-5	>0	1-3	Fair	Hawthorn-dominated field hedge. Trimmed to W. Untrimmed section to E along road cutting with trees.	-	>40	C2	Crown spread +1m
H24a	Hawthorn, Hazel, Elder, Apple, Holly	No	Semi-mature	N/A	4-6	>0	2-4	Fair	Untrimmed hedge along road cutting with trees.	-	>40	C2	Crown spread +1m
H25	Hawthorn, Elder, Sycamore	No	Semi-mature	N/A	1.5	>0	1	Fair	Trimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H26	Hawthorn, Elder, Sycamore	No	Semi-mature	N/A	1.5	>0	1	Fair	Trimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H27	Hawthorn, Sycamore	No	Semi-mature	N/A	7.0	>0	2-4	Fair	Hawthorn-dominated field hedge. Top untrimmed.	-	>40	C2	Crown spread +1m
H28	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Hawthorn field hedge. W side trimmed. E side untrimmed.	-	>40	C2	Crown spread +1m
H29	Hawthorn, Ash	No	Semi-mature	N/A	3.5-5	>0	2-4	Fair	Untrimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m

No.	Species	Measurements Estimated	Age	Stem Diameter (cm)	Height (m)	Crown Height (m)	Crown Spread (m)	Condition	Comments	Recommended Work	Life Expectancy	Retention Category	Root Protection Area
H30	Hawthorn	No	Semi-mature	N/A	3.5-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H31	Hawthorn	No	Semi-mature	N/A	2-3	>0	2-3	Fair	Hawthorn field hedge.	-	>40	C2	Crown spread +1m
H32	Hawthorn, Elder	No	Semi-mature	N/A	3-4.5	>0	2-4	Fair	Untrimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H33	Hawthorn	No	Semi-mature	N/A	4-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H34	Hawthorn	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H35	Hawthorn, Oak	No	Semi-mature	N/A	3-5	>0	2-4	Fair	Untrimmed hawthorn-dominated field hedge.	-	>40	C2	Crown spread +1m
H36	Hawthorn	No	Semi-mature	N/A	4-5	>0	2-4	Fair	Untrimmed hawthorn field hedge.	-	>40	C2	Crown spread +1m
H37	Hawthorn, Ash, Sycamore	No	Semi-mature	N/A	3-5	>0	3-4	Fair	Hawthorn-dominated field hedge on road boundary. Top untrimmed.	-	>40	C2	Crown spread +1m
H38	Hawthorn	No	Semi-mature	N/A	2-5	>0	2-4	Fair	Hawthorn field hedge on garden boundary. Some sections trimmed.	-	>40	C2	Crown spread +1m
H39	Hawthorn, Ash, Sycamore	No	Semi-mature	N/A	3-8	>0	3-4	Fair	Hawthorn-dominated field hedge on road boundary. Top untrimmed.	-	>40	C2	Crown spread +1m



APPENDIX B – TREE SPECIES LIST

Appendix B – Species List & Potential Tree Heights

Species	Common Name	Potential Height (m)
<i>Acer campestre</i>	Field maple	15
<i>Acer pseudoplatanus</i>	Sycamore	22*
<i>Aesculus hippocastanum</i>	Horse chestnut	20*
<i>Alnus glutinosa</i>	Common alder	18*
<i>Betula pendula</i>	Silver birch	14*
<i>Chamaecyparis lawsoniana</i>	Lawson's cypress	18*
<i>Corylus avellana</i>	Hazel	8*
<i>Crataegus monogyna</i>	Hawthorn	10*
<i>x Cupressocyparis leylandii</i>	Leyland cypress	20*
<i>Fagus sylvatica</i>	Beech	20*
<i>Fraxinus excelsior</i>	Ash	23*
<i>Ilex aquifolium</i>	Holly	12*
<i>Ligustrum ovalifolium</i>	Privet	6
<i>Malus domestica</i>	Domestic apple	10*
<i>Malus sylvatica</i>	Crab apple	10*
<i>Pinus sylvatica</i>	Scots pine	20*
<i>Prunus avium</i>	Wild cherry	17*
<i>Prunus cerasifera</i>	Cherry plum	10*
<i>Prunus laurocerasus</i>	Cherry laurel	8*
<i>Prunus spinosa</i>	Blackthorn	8*
<i>Quercus petraea</i>	Sessile oak	22
<i>Quercus robur</i>	English oak	20*
<i>Salix caprea</i>	Goat willow	15
<i>Salix cinerea</i>	Grey willow	8
<i>Salix fragilis</i>	Crack willow	24*
<i>Sambucus nigra</i>	Elder	10*
<i>Sorbus aria</i>	Whitebeam	12*
<i>Sorbus aucuparia</i>	Rowan	11*
<i>Tilia cordata</i>	Small-leaved lime	22*
<i>Ulmus glabra</i>	Wych elm	18*
<i>Ulmus minor</i>	English elm	24*

* - Typical mature height given by NHBC Chapter 4.2¹³

¹³.<https://nhbc-standards.co.uk/4-foundations/4-2-building-near-trees/>

**APPENDIX C – TREE QUALITY & VALUE ASSESSMENT
CATEGORIES**

Tree Quality & Value Categories

(from BS5837:2012, Table 1 – ‘Cascade chart for tree quality assessment’)

Category and definition	Criteria (including subcategories where appropriate)			Plan colour
Trees unsuitable for retention				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning) Trees that are dead or are showing signs of significant, immediate, and irreversible overall 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 NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve			Dark red
TREES TO BE CONSIDERED FOR RETENTION				
	1. Mainly arboricultural values	2. Mainly landscape values	3. Mainly cultural values, including conservation	
Category A Trees of high quality 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)	Light green
Category B Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value	Mid blue
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 150 mm	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	Grey

APPENDIX D – TREE CONSTRAINTS PLAN

APPENDIX E – TREE PROTECTION PLAN

APPENDIX F – REPORT CONDITIONS

Arboricultural Report – Barnsley West

This report is produced solely for the benefit of Sterling Capital Plc & Strata Homes Ltd, and no liability is accepted for any reliance placed on it by any other party unless specifically agreed by us in writing.

This report is prepared for the proposed uses stated in the report and should not be relied upon for other purposes unless specifically agreed by us in writing. In time technological advances, improved practices, fresh information or amended legislation may necessitate a re-assessment. Opinions and information provided in this report are on the basis of Tetra Tech using reasonable skill and care in the preparation of the report.

This report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times.

This report is limited to those aspects reported on, within the scope and limits agreed with the client under our appointment. It is necessarily restricted and no liability is accepted for any other aspect. It is based on the information sources indicated in the report. Some of the opinions are based on unconfirmed data and information and are presented accordingly within the scope for this report.

Reliance has been placed on the documents and information supplied to Tetra Tech by others, no independent verification of these has been made by Tetra Tech and no warranty is given on them. No liability is accepted or warranty given in relation to the performance, reliability, standing etc of any products, services, organisations or companies referred to in this report.

Whilst reasonable skill and care have been used, no investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal, budget and weather related conditions.

Although care is taken to select monitoring and survey periods that are typical of the environmental conditions being measured, within the overall reporting programme constraints, measured conditions may not be fully representative of the actual conditions. Any predictive or modelling work, undertaken as part of the commission will be subject to limitations including the representativeness of data used by the model and the assumptions inherent within the approach used. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions.

The potential influence of our assessment and report on other aspects of any development or future planning requires evaluation by other involved parties.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

January 2021

Tetra Tech Limited