



THE
ENVIRONMENT
PARTNERSHIP



FLETCHER FOLD ROAD
BURY
ARBORICULTURAL IMPACT ASSESSMENT
APRIL 2024

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Executive Summary

1. TEP has been commissioned by Bolton at Home to conduct a survey of land at Fletcher Fold Road in Bury and a review of designations, policies and other instruments of relevance to arboriculture. This report presents the results and effects on arboriculture that would arise in connection with the grant of planning permission.
2. 26 individual trees and 6 groups of trees were recorded within influencing distance of the application site.
3. Trees are located around the margins and define the site boundary, with these margins expanding into wider and denser canopy cover to the east and south-east. The majority are native species and are middle aged, with sections of smaller, developing trees throughout. There are a small number of larger and more mature trees, with most of these located on or adjacent to the south-western boundary; in the north-western corner; or within wider tree groups to the east.
4. The desktop review and site survey no trees within a Conservation Area; no ancient woodland; no veteran trees; and one instance of a Deciduous Woodland Habitat of Principal Importance. The entire site is located within the City of Trees Community Forest. Trees protected by a Tree Preservation Order are situated adjacent to the site to the east; two of which appear to be included within the canopy of group G4 but are outside of the site boundary.
5. The proposed development comprises construction of 43 residential dwellings, comprising a mix of one-, two- and three-bedroom apartments, with associated access, drainage, and hard and soft landscaping.
6. Five individual trees and one tree group comprising approximately 0.03ha would be removed. The total canopy cover proposed or removal, inclusive of individual trees and tree groups, equates to approximately 0.041ha. One tree and one group would also be subject to canopy pruning and understorey replacement to improve natural light and security.
7. The development would give rise to no adverse effects that cannot be mitigated or offset.
8. A scheme of new planting is proposed, including a mix of native and ornamental, small and medium to large growing tree species and native and ornamental hedgerow planting. The development would result in a net gain of tree cover and hedgerow and would also result in increased species diversity and distribution of trees.
9. Tree protection measures, inclusive of special construction methodology, to be observed during construction should be provided, in the form of an Arboricultural Method Statement. Compliance with tree protection measures during construction should be a condition of any planning consent, and subject to independent monitoring by an arboriculturist.
10. This report constitutes a valid basis for the evaluation of impacts on trees resulting from the proposed development for a period not exceeding 2 years from the earliest

survey date. After this, it would be necessary to review baseline data and conclusions to ensure reliability.

11. All trees that would be retained can be protected in accordance with BS5837:2012. Where the recommendations of this report have been followed, any future deterioration in tree condition shall not be attributable to the development.

1.0 Scope

- 1.1 TEP has been commissioned by Bolton at Home to conduct an arboricultural survey of land at Fletcher Fold Road in Bury and to make an assessment in accordance with BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations.
- 1.2 This report has been produced to support a planning application. It describes the findings of field and desktop surveys; the effects that granting planning permission would have on arboriculture; and measures that are and/or should be incorporated in the proposed development.

Survey

- 1.3 The surveys were undertaken on 24th October 2023 and 15th April 2024 in accordance with BS 5837 by a qualified arboriculturist. The survey method is included at Appendix B.
- 1.4 A topographical survey was used to record the position of trees and vegetation (drawing reference: S23-0937, Rev A). Where trees were not shown on the topographical survey, their locations were estimated¹.
- 1.5 Trees on private land outside the application boundary, and at inaccessible locations² were surveyed insofar as was practicable. Whilst reasonable effort has been made to ensure the accuracy and comprehensiveness of such records, it cannot be guaranteed.
- 1.6 All approximated tree locations should be resolved prior to development. This may influence the conclusions of this report.
- 1.7 Dense shrub vegetation to south-east of the site that was present during the original survey in October 2023 has since been cleared to facilitate gathering of additional topographical survey data. No large trees were removed.

Limitation

- 1.8 This report relates to a specific development proposal and should not be interpreted as advice in any other circumstance, including but not limited to the promotion or assessment of alternative schemes; the design of buildings and foundations; management of tree risk; and tree-related subsidence.
- 1.9 This report constitutes a valid basis for the evaluation of impacts on trees resulting from the proposed development for a period not exceeding 2 years from the earliest survey date. After this, it would be necessary to review baseline data and conclusions to ensure reliability.
- 1.10 Conclusions are drawn based on professional judgement, experience and the information provided. If the proposed development changes, the conclusions of this report may cease to be reliable.

¹ Estimated feature locations are marked on Drawing 1

² Limitations to the survey are described at Appendix A

- 1.11 Where the recommendations of this report have been followed, any future deterioration in tree condition shall not be attributable to the development.

Other assessments

- 1.12 Woody vegetation may be described and evaluated by other assessments, including ecology, landscape, heritage and for biodiversity net gain calculations. It should be noted that these follow different methodologies and sometimes use the same terms to describe different parts of the treescape (e.g. 'hedgerow', and 'woodland'). Care should be taken when reading across or comparing assessments to ensure that comparisons are reliable. Specialist advice may be needed to understand apparent discrepancies in definition or measurement.

2.0 Baseline

The Site

- 2.1 The site is located in Bury and is situated south of Fletcher Fold Road and Goshen Lane; south-west of Manor House Gardens; north-east of Millwood Court; and east of A56 Manchester Road. It is surrounded by private residences and is largely unused, with the exception of a public footpath that runs through from Fletchers Fold Road south to Millwood Court.
- 2.2 Much of the centre of the site comprises hardstanding, commensurate with being brownfield, with groups of trees lining most of the site boundary. Parts of the boundary are also overgrown. It is approximately 0.9ha in size and is centred approximately on grid reference SD 80632 08684.



Figure 1 Site location and approximate boundary (1:4,000)

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Tree Survey

- 2.3 26 individual trees (T1-T26) and 6 groups (G1-G6) of trees were recorded within influencing distance of the application site.
- 2.4 Trees and Groups are collectively referred to by this assessment as 'Features'. These provide the resolution of the tree survey, and are defined according to Appendix B. Feature locations, their quality categories, canopy spreads and root protection areas are shown on Drawing 1.
- 2.5 Canopy cover, rather than number of features, is used by this assessment to describe the quantum of trees. The following table provides the aggregated canopy area for mapped trees and the total length of mapped hedgerow on Drawing 1. In some cases, this may be more than the absolute area due to canopy overlap between adjacent features.

Table 1 Existing canopy cover and hedgerow length

Trees	Groups	Woodland	Hedgerow
0.1158ha	0.4431ha	0ha	0m

2.6 All arboricultural information recorded during the survey is presented at Appendix A.

Overview

- 2.7 Trees are located around the margins and define the site boundary, with these margins expanding into wider and denser canopy cover to the east and south-east. The majority are native species and are middle aged, with sections of smaller, developing trees throughout. There are a small number of larger and more mature trees, with most of these located on or adjacent to the south-western boundary (T3, T5 to T7); one within wider group G5 (T4); and one in the north-western corner (T1).
- 2.8 The most significant area of tree cover is to the east and comprises groups G4 and G5 (inclusive of T4 and T9 to T25). These trees provide significant screening between the site and adjacent dwellings and provide habitat as relatively large areas of continuous canopy in an urban environment. Tree T4 is located at the north-western end of the group and is a mature sycamore and is the largest tree on site with a diameter of 940mm. It is in good condition with a full crown and good form and no obvious defects.
- 2.9 On the south-western border of the site is group G6, inclusive of T5 to T7. This comprises a group of predominantly holm oak with smaller, self-sown trees forming the understorey. Tree T5 is also within this group and is a mature holm oak with excellent form and no obvious defects. These features collectively create a dense screen between the site and the north-eastern edge of an existing public footpath that spans the south-western boundary. Trees T6 and T7 are both mature cherry species and are located in a grass area on the south-west side of the path.
- 2.10 To the west of the site are three trees (T1 to T3) and a group of dense sycamore, hawthorn, cherry and elder (G1). T1 is a large goat willow in the north-western corner and is located within G1, although larger and more established than those in the surrounding group. These features provide some screening between the site and the adjacent dwellings. T2 is a wild cherry within the site that is heavily overgrown by ivy and is trifurcate. There is some decline evident in the upper canopy. T3 is a large and mature wych elm with good form, located adjacent to the site within a third-party garden. It is a rare surviving example of its species, particularly due to its size, age and excellent condition.
- 2.11 On the northern boundary adjacent to Goshen Lane are groups G2 and G3. These comprise Italian alder, common alder, silver birch, sessile oak and elder. The trees within G3 are located on top of an embankment retained by a wall on the south side. The trees are generally larger and more established with a smaller amount of self-sown trees interspersed. Dieback is evident in some birch trees within the group and there is one dead birch. G3 provides screening and, collectively as part of the wider treescape, an area of largely continuous canopy cover providing habitat.

Tree Quality

- 2.12 Under BS 5837 trees are objectively assigned one of four categories to describe their quality. The table below includes a description of each category and the amount of canopy cover meeting the classification.

Table 2 Summary of BS 5837 quality categorisation³

Category	Description	Total existing
A	Trees of high quality, typically with a long remaining life expectancy; and with clear and identified merit as specimens, visually, culturally or for conservation.	0.0169ha (3%)
B	Trees of moderate quality, typically with at least a medium remaining life expectancy; with remediable defects only; or low quality but with collective merit.	0.4865ha (87%)
C	Trees of low quality, typically with at least a short remaining life expectancy; unremarkable trees of limited merit or impaired condition; or young and small trees that could be replaced.	0.0543ha (10%)
U	Trees that cannot realistically be retained in the context of current land use for more than ten years; with serious and irreparable defects, pathogens or decline.	0.0011ha (<1%)

- 2.13 Tree cover across is predominantly of moderate quality (Category B) due to the large groups around the eastern and southern fringes of the site that make up the vast majority of tree cover. These areas provide areas of dense and largely continuous canopy cover and collectively have good arboricultural, landscape and habitat value.
- 2.14 Low quality tree cover (Category C) is the second largest proportion and comprises 10 trees and one group within the site. The group is comprised of younger and developing, self-set trees which provides some limited screening and habitat value. The trees are typically those that are young and small or those with irreparable defects.
- 2.15 High quality (Category A) tree cover comprises two trees (T3 and T4). Both are large, mature, prominent trees that provide excellent arboricultural and landscape value within the site and to the wider area. T3 is also a rare surviving example of its species, particularly due to its age, size and excellent condition.
- 2.16 There are two poor quality (Category U) trees (T10 and T26) within the site. These account for less than 1% of the total canopy cover and are both small, significantly declining trees.

³ Refer to Appendix B for the full table

Root Protection Areas

- 2.17 Using the results of the field survey a Root Protection Area (RPA) has been calculated in accordance with BS 5837 using each tree's stem diameter at 1.5m⁴. The RPA represents the minimum area around each tree that must be left undisturbed to ensure its survival.
- 2.18 Where a tree's rooting pattern is considered to have been influenced by site conditions the RPA has been adjusted or offset to represent the anticipated spread of roots⁵. On this site, influences on root morphology are considered to be existing hardstanding and previous foundations from former buildings that have now been demolished.

Policy, designations and protection

Planning Policy

- 2.19 All trees are a material consideration in the planning process. Effects on trees will therefore be considered by the consenting authority. Adverse effects that cannot be mitigated and which are not acceptable on balance against other benefits may weigh against the granting of planning permission.
- 2.20 There should be a common-sense ambition to limit tree loss to that which is strictly necessary to facilitate the proposal, and to achieve a good design. Trees which are retained should not be harmed and the proposal should present a reasonable account of the prospects for tree retention in accordance with BS 5837.

National Planning Policy Framework

- 2.21 The National Planning Policy Framework (NPPF) has an overarching environmental objective. This embeds protecting and enhancing the natural environment, improving biodiversity, and adapting to climate change in decision making⁶.
- 2.22 NPPF states that existing trees should be retained wherever possible⁷.
- 2.23 Planning policies and decision making should recognise the wider benefits from natural capital and ecosystem services, including those provided by trees and woodland, and minimise impacts on and provide net gains for biodiversity⁸.
- 2.24 Where significant harm to biodiversity cannot be avoided, mitigated, or compensation provided, planning permission should be refused⁹. Loss or fragmentation of trees and woodland may constitute or give rise to significant harm to biodiversity.
- 2.25 There is a strong policy presumption against loss or deterioration of irreplaceable habitats, such as ancient woodland and ancient or veteran trees. Development resulting in the loss or deterioration of irreplaceable habitats should be refused unless there are wholly exceptional reasons, and a suitable compensation strategy exists¹⁰.

⁴ Refer to Appendix A for Stem Diameters and Appendix B for further information on methodology

⁵ See Drawing 1 for RPA shapes

⁶ NPPF paragraph 8 (c)

⁷ NPPF paragraph 136

⁸ NPPF paragraph 180 (b) (d)

⁹ NPPF paragraph 186 (a)

¹⁰ NPPF paragraph 186 (c)

- 2.26 Opportunities should be taken to incorporate trees in developments, with appropriate measures to secure the long-term maintenance of new planting. Planning decisions should ensure that new streets are tree-lined unless there are clear, justifiable and compelling reasons why this would be inappropriate¹¹.

Local Planning Policy

- 2.27 Bury Council has an adopted Unitary Development Plan (August 1997) that contains policies of relevance to trees and this site. In particular, the policies of relevance are H2/2, EN8 and EN8/2. The most relevant parts of each policy are recreated below.

H2/2 - The Layout of New Residential Development

New residential development will be required to demonstrate acceptable standards of layout.

Factors to be considered when assessing proposals will include:

- *landscaping and screening;*
- *protection/provision of trees and hedgerows*

EN8 – Woodland and Trees

The Council will support the retention of trees, woods, copses and hedgerows and encourage natural regeneration and new and replacement tree planting throughout the Borough.

EN8/2 - Woodland and Tree Planting

The Council will support and encourage new woodland and tree planting in the Borough. In considering development proposals, the Council will encourage the planting of hedges, trees and woodlands using locally native species.

- 2.28 In addition, the council has published supplementary information that gives guidance on the interpretation and application of local planning policy. In particular, the Design and Layout of New Development Supplementary Planning Guidance document is of relevance.
- 2.29 Bury is also one of nine Greater Manchester districts included within the Places for Everyone (PfE) joint development plan document (DPD) which was adopted in March 2024. This has policies of relevance to trees and this site, namely policy JP-G7 which is recreated below.

Policy JP-G7 - Trees and Woodland

We will work to deliver the aims and objectives of the Greater Manchester Tree and Woodland Strategy, aiming to significantly increase tree cover, protect and enhance woodland, and connect people to the trees and woodland around them.

This will be done through local planning and associated activities such as:

¹¹ NPPF paragraph 136

- 1. Protecting and expanding the mosaic of woodland habitats, linking fragmented areas of woodland, in particular wooded cloughs and pockets of ancient and riverside (riparian) woodland;*
- 2. Encouraging habitat diversity through conserving and managing existing woodland and trees that are of heritage, cultural and/or aesthetic value, including ancient woodland and veteran trees;*
- 3. Aiming to plant a tree for every resident in the plan area over the next 25 years as part of the City of Trees initiative;*
- 4. Targeting tree-planting at the areas of greatest need where the green infrastructure benefits can be maximised, whilst avoiding the loss of, or harm to, other priority habitats, including encouraging woodland planting schemes on areas of low-grade agricultural land and land in need of remediation;*
- 5. Establishing a new City Forest Park in Salford, Bolton and Bury, which will provide a vast urban forest close to the City Centre;*
- 6. Considerably increasing the provision of street trees within urban areas;*
- 7. Promoting the provision of community orchards to increase fruit consumption;*
- 8. Promoting the opportunity for woodland conservation to raise awareness for the sustainable use of timber;*
- 9. Securing a diversification of broadleaved species, in order to increase biodiversity and disease resilience;*
- 10. Improving public access to woodland and trees particularly by sustainable travel models to capture the health and wellbeing benefits whilst managing the associated pressures;*
- 11. Encouraging the positive management of woodland to bring it into a more productive state, improve habitat diversity, and more effectively contribute to important green infrastructure functions such as flood risk management, urban cooling and carbon storage/sequestration;*

And through development as follows:

- 12. Where development would result in the loss of existing trees, requiring replacement on the basis of two new trees for each tree lost, or other measures that would also result in a net enhancement in the character and quality of the treescape and biodiversity value in the local area, with a preference for on-site provision; and*
- 13. Protecting trees and woodland during the construction phase of development.*

Pre-app

- 2.30 Pre-application discussions were held with the local planning authority 7th February 2024 in relation to the proposed development. These were not attended by any arboriculturists. Following this meeting, a letter from Helen Pressley, a Bury Council Planning Officer, was produced and included some concerns regarding the development design and some objectives and requirements in relation to arboriculture, including:
- (i) Potential for increased risk of crime to one ground floor apartment due to existing trees and the adjacent public footpath where there is a lack of natural surveillance;
 - (ii) Provision of a tree survey in accordance with BS 5837 should be included as part of the application;
 - (iii) Works proposed to trees should be set out with works justified and details of replacement mitigation and proposed tree protection included; and
 - (iv) Trees should be replaced at a 2:1 ratio for each tree lost or other measures that would also result in net enhancement in the character and quality of the treescape and biodiversity value of the local area.

Environment Act

- 2.31 The Environment Act places a duty on public bodies, including planning authorities, to conserve and enhance biodiversity through the exercise of their functions¹².
- 2.32 The Act makes provision for biodiversity gain to be a condition of planning permission in England. The assessment of baseline biodiversity includes trees, and any measures to offset losses may also include tree planting or enhancement. Biodiversity Net Gain (BNG) is not covered by this report, although data from this assessment may inform a BNG assessment and calculations.
- 2.33 Biodiversity is only one of the benefits provided by trees. Tree removal and planting may affect other functions or objectives, and the BNG assessment process does not provide a comprehensive means of either evaluating, mitigating or offsetting effects on arboriculture.
- 2.34 In general terms, effects on arboriculture should be assessed in parallel to biodiversity, and any overlap between assessments identified. Tree planting or enhancement for biodiversity should be treated as part of arboricultural offsetting measures, and supplemented as necessary by other measures to render all adverse arboricultural effects acceptable. On this site, further guidance has been provided via pre-application discussion and PfE policy JP-G7 and it is understood that trees should be replaced at a 2:1 ratio for each removed or another measure where the treescape and biodiversity value of the local area will have net enhancement.

¹² Environment Act 2021 Section 102 (1) and (2)

Tree Preservation Orders

- 2.35 A check with the local authority was undertaken on 25th April 2024. The online mapping system confirmed that trees adjacent to the site are protected by Tree Preservation Order. Two of these trees appear to be located on third party land, although their exact location has not been established. Should any development proposals remove trees within group G4, the exact locations of these trees should be confirmed with the local authority.

Table 3 Tree Preservation Orders

Order name	Order feature reference	Survey feature reference
Tree Preservation Order Number 160	T11 T14	G4

- 2.36 Works to TPO trees must only be undertaken with the written consent of the Local Authority, given in the form of a planning permission (other than an outline planning permission), discharge of reserved matters, or via a TPO application.
- 2.37 In the context of a planning application, the presence of a TPO is material but it does not necessitate the retention of protected trees within proposed development. Equally, the lack of a TPO does not mean that removal of any particular tree would be without significant impact. The existence of a TPO may indicate the local authority's view regarding priorities for tree retention and amenity value. BS 5837 recommends that TPOs should be considered in the design process.

Conservation Areas

- 2.38 A check with the local authority was undertaken on 25th April 2024. The online mapping system confirmed that no trees within or adjacent to the site are within a Conservation Area.

Ancient Woodland

- 2.39 Ancient Woodland is defined in England as any area that has been wooded continuously since at least 1600 AD; it is regarded as 'irreplaceable'¹³. The distribution of Ancient Woodland has been assessed on the basis of Natural England's Ancient Woodland Inventory (Provisional) for England via www.magic.defra.gov.uk.
- 2.40 There is no ancient woodland within or adjacent to the site.

Veteran Trees

- 2.41 Veteran is a term that is used within arboriculture to describe a classification of trees with superlative significance and value. Various definitions exist. In the context of planning, the applicable definition is in NPPF¹⁴.

¹³ NPPF Annex 2: Glossary (p.71)

¹⁴ NPPF Annex 2: Glossary (p. 67)

- 2.42 NPPF defines veteran trees are those which, because of age, size and condition, are of exceptional biodiversity, cultural or heritage value. Not all veteran trees are ancient, though they tend to be relatively old for the species. Veteran trees with exceptional biodiversity value are an irreplaceable habitat¹⁵.
- 2.43 Trees that are not irreplaceable habitats, but which meet other definitions of veteran are likely to be trees of significance to culture, heritage and habitats, and may also merit significant conservation efforts.
- 2.44 There is no comprehensive national register of veteran trees. The Woodland Trust maintains an inventory of old and large trees, some of which meet the NPPF definition¹⁶. At the time of writing, it contained no records of relevance to the site.
- 2.45 An assessment of each tree was made by a qualified arboriculturist as part of the tree survey. There are no veteran trees within or adjacent to the site.

Community Forests

- 2.46 Online mapping¹⁷ confirmed that the site is within the City of Trees Community Forest.

Habitats of Principal Importance

- 2.47 A list¹⁸ of habitats which are of principal importance for the purpose of conserving¹⁹ biodiversity is maintained by the Secretary of State²⁰. The list includes habitat types that are defined by woody vegetation, which are listed below. The geographical extent and location of these habitats (excluding Hedgerow) is mapped by Natural England on the Priority Habitat Inventory²¹. Observations were also made to corroborate the mapping during the site survey.
- 2.48 All public authorities, including local planning authorities and statutory undertakers have a duty to have regard to the purpose of conserving biodiversity²². Habitats of Principal Importance provide a means of evaluating effects on biodiversity, and thereby a metric to demonstrate the discharge of this duty. In the context of planning, adverse effects on Habitats of Principal Importance that cannot be mitigated are material to decision making.

Deciduous Woodland

- 2.49 Six distinct types of woodland²³ are amalgamated in the Inventory under the habitat type 'Deciduous Woodland'.
- 2.50 The Inventory has a record of Deciduous Woodland within influencing distance of the site. This is broadly contiguous with part of survey feature G4.

¹⁵ NPPF Annex 2: Glossary (p. 71)

¹⁶ <https://ati.woodlandtrust.org.uk/>

¹⁷ [Where are the forests - England's Community Forests \(englandscommunityforests.org.uk\)](https://www.gov.uk/government/publications/habitats-and-species-of-principal-importance-in-england)

¹⁸ <https://www.gov.uk/government/publications/habitats-and-species-of-principal-importance-in-england>

¹⁹ The Environment Act 2021, 102 (1) and (2) amends this duty to include enhancement

²⁰ Natural Environment and Rural Communities Act 2006, 41 (1)

²¹ <https://magic.defra.gov.uk/MagicMap.aspx>

²² Natural Environment and Rural Communities Act 2006, 40 (1)

²³ Upland Oakwood; Lowland Beech and Yew Woodland; Upland Mixed Ashwoods; Wet Woodland; Lowland Mixed Deciduous Woodland; Upland Birchwoods

*Wood Pasture and Parkland*²⁴

- 2.51 Wood-pasture and parkland are mosaic habitats valued for their trees, especially veteran and ancient trees, and the plants and animals that they support. They are exclusively associated with some species of insects, lichens and fungi which depend on dead and decaying wood. Grazing animals and continuity of management are fundamental to the existence of the habitat and it can be a type of ancient woodland.
- 2.52 The Inventory has no records of Wood Pasture and Parkland at the site.

*Traditional Orchards*²⁵

- 2.53 Traditional orchards are defined, for priority habitat purposes, as groups of fruit and nut trees planted on vigorous rootstocks at low densities in permanent grassland; and managed in a low intensity way. Habitat structure rather than vegetation type, topography or soils, is the defining feature of the habitat.
- 2.54 The Inventory has no records of Traditional Orchards at the site.

*Hedgerows*²⁶

- 2.55 Hedgerow is any boundary line of trees or shrubs over 20m long and less than 5m wide, and where any gaps are less than 20m wide. It may include banks, walls, ditches, herbaceous vegetation, climbing plants or trees within 2m of the centre line. All hedgerows which comprise at least 80% woody native species are included.
- 2.56 The survey identified no hedgerows²⁷ and no tree groups that meet the description of the Habitat of Principal Importance.

Biodiversity Net Gain and Arboriculture

- 2.57 Woody vegetation that is included in this assessment may also be mapped and classified as part of an ecological assessment.
- 2.58 Biodiversity assessments and calculations use *Broad Habitat Types* and *Habitat Definitions* derived from UKHab²⁸ to classify woody vegetation. These include *Individual trees*, *Hedgerow*, *Heathland and Shrub*, and *Woodland and Forest*. These terms may be used with different definitions in other assessments, including tree surveys.
- 2.59 The sub-division of woody vegetation into assessment units or *features* may differ between ecological and arboricultural assessments; the former being a classification of habitats, and the latter being a classification that reflects management history and opportunities, landscape, amenity, culture, and heritage, as well as habitats.
- 2.60 The table below sets out the relationship between arboricultural and ecological classification of woody vegetation in general terms.

²⁴ [Wood-pasture and parkland \(UK BAP Priority Habitat description\) – Revised 2011 \(jncc.gov.uk\)](#)

²⁵ [Traditional orchards \(UK BAP Priority Habitat description\) \(jncc.gov.uk\)](#)

²⁶ [Hedgerows \(UK BAP Priority Habitat description\) \(jncc.gov.uk\)](#)

²⁷ See Appendix A

²⁸ See, The UK Habitat Classification Habitat Definitions Version 2.1 (July 2023)

Table 4 Arboricultural and ecological classification of woody vegetation

Tree survey classification	Habitat classification (UKHab)
Trees	Normally recorded as <i>Individual trees</i> (Urban tree or Rural tree) except where within another habitat (e.g. within a woodland, line or trees, or as a hedgerow tree), in which case trees may be part of the surrounding habitat ²⁹
Groups	No equivalent classification exists. Groups may comprise any combination of <i>Individual trees</i> ; <i>Hedgerows</i> , (including <i>Lines of trees</i>); <i>Woodland and forest</i> Habitat Types with moderate or low distinctiveness ³⁰ ; and some <i>Heathland and shrub</i> habitats ³¹ , especially where young or with developing composition
Woodland	Typically, <i>Woodland and forest</i> Habitat Types with high distinctiveness ³² (e.g. Lowland Mixed Deciduous); also, less commonly, <i>Heathland and shrub</i> habitats comprising woody species, where representing the natural climax vegetation ³³
Hedgerow/Hedges	Typically, <i>Hedgerow or Line of trees</i> ; less commonly may be mapped as <i>Woodland and forest</i> habitats, especially where within or on the edge of areas of trees or scrub

- 2.61 The term Woodland within the tree survey tends to correspond with Woodland Habitats of Principal Importance, and Woodland Habitat Types with high distinctiveness. It is reserved for areas of tree cover with that have or are clearly developing the species, age and structural composition and characteristics of semi-natural woodland and represent a stable and naturally regenerating climax vegetation. This tends to exclude woodland and shrub habitats with moderate or low distinctiveness, which are not regarded as 'true' woodland by this assessment.
- 2.62 Under the Biodiversity Metric 4.0, Individual trees are treated as having a habitat area based on the diameter of the stem. Small, Medium and Large trees are defined as those with stem diameters between 70mm to 300mm, from 300mm to 900mm, and above 900mm respectively³⁴. The data tables at Appendix A include stem diameter measurements for trees that were recorded as individuals by the tree survey, and stem diameter ranges for features containing multiple trees³⁵.

²⁹ Tree surveys may isolate and record trees individually for a wide range of reasons that do not relate to habitat

³⁰ Loosely, 'Other Woodland' types, including UKHab Classifications w1g, w1h and their sub-classifications

³¹ All types of Dense scrub h3 except h3d (Bramble scrub)

³² For Very High distinctiveness, see Section 2.0 *Habitats of Principal Importance, Wood Pasture and Parkland*

³³ All types of Dense scrub h3, except h3d (Bramble scrub), and h3g (Rhododendron scrub)

³⁴ Stem diameters of 300mm (Small), 900mm (Medium) and 1,300mm (Large) are assumed

³⁵ Calculated according to BS5837 in the case of multi-stemmed trees

- 2.63 Irreplaceable habitats, including ancient woodland and veteran trees, must be recorded separately within the Biodiversity Metric. Accounting for loss or deterioration of irreplaceable habitats cannot be done using the Metric. Enhancement may contribute towards biodiversity where there is no loss or deterioration.³⁶
- 2.64 The Biodiversity Net Gain Impact Assessment and Design Stage Report (ref: 10188.003) should be referred to for detailed information and assessment of Biodiversity Net Gain.

Protected Species

- 2.65 No assessment of the presence of protected species has been made during the production of this report. Features of possible interest that were observed incidentally during the tree survey are recorded in Appendix A.
- 2.66 Works to and around trees have the capacity to affect protected species where present, particularly including birds, bats, great crested newts, badgers, dormice, otters and water voles. Contractors should be familiar with the locations and sensitivities of any protected species that are present and take reasonable avoidance measures or comply with the requirements of any licence agreement in accordance with the advice of an ecologist.

Birds

- 2.67 Intentional harm to a wild bird, egg, or a nest that is in use or being built is an offence³⁷. Disturbance of certain wild birds that are building a nest, or are in, on or near a nest containing eggs or young, or disturbance of dependent young is also an offence³⁸.
- 2.68 All trees are a potential habitat for nesting birds so tree work should ideally, but not essentially, be undertaken outside the bird nesting season. Between March and August, a detailed inspection of each tree should be undertaken by a qualified ecologist to confirm the absence of nesting birds immediately prior to works.
- 2.69 Some birds nest outside the core nesting season. If an active nest is found at any time of year, work likely to affect the nest must be halted until the nest becomes inactive. This will vary depending on the species of bird but is typically up to six weeks. The advice of an ecologist regarding the duration and size of a protection buffer around the nest should be sought.

Bats

- 2.70 It is an offence to damage, destroy or obstruct access to any structure or place which is used for shelter or protection³⁹, or breeding or resting⁴⁰ by a bat. Mature trees often contain cavities, splits and ivy, which may be attractive to bats.

³⁶ See Biodiversity Metric User Guide, Section 3.5

³⁷ Wildlife and Countryside Act 1981, 1 (1)

³⁸ Wildlife and Countryside Act 1981, 1 (5)

³⁹ Wildlife and Countryside Act 1981, 9 (4)

⁴⁰ The Conservation of Habitats and Species Regulations 2017, 43 (1)

- 2.71 The Ecological Impact Assessment (EclA) report (ref: 10188.002) identified eight trees with the suitability to support roosting bats. These trees and their roosting suitability are detailed within Table 1 of the EclA report.
- 2.72 If the presence of a bat, or a roost or resting site is suspected whilst undertaking works on any trees, operations must be halted, and the advice of appropriately licensed ecologist should be sought.

3.0 Effects

- 3.1 In simple terms, the effects on arboriculture comprise an account of which existing trees, groups of trees, hedgerow and woodland would not be retained within the proposed development; what significance they have; and whether adverse effects would or can be mitigated or offset.
- 3.2 Effects may also include changes to the prospects, qualities and/or future management of remaining trees.

Proposed development

- 3.3 The proposed development comprises construction of 43 residential dwellings, comprising a mix of one-, two- and three-bedroom apartments, with associated access, drainage, and hard and soft landscaping.
- 3.4 The proposed layout is shown on Drawing 2 and Drawing 3 and is based on The Site Layout Plan (drawing ref: 6071-P0Z-XX-ZZ-DR-A-1200, Rev P08) provided by Pozzoni Architecture.
- 3.5 Preliminary external works plans showing the detail and arrangement of drainage (drawing ref: 23-B-13947-200, Rev A) and site levels (drawing ref: 23-B-13947-100) were available to inform the production of this assessment. No plans showing other utilities or retaining structures were available. The preliminary drainage and site level plans, and plans showing other utilities and retaining structures as applicable, should be reviewed by an arboriculturist prior to commencement of construction to ensure that retained trees will not be impacted by the finalised alignments and proposals.
- 3.6 The proposed development would include tree planting. This is shown on the Planting Plan (drawing ref: D10188.202) and includes a mixture of native and ornamental, small and medium to large growing tree species and ornamental hedgerow/shrub planting. The application under consideration would secure the detail of this planting. Therefore, this planting can be relied upon to inform a planning decision.

Design considerations

- 3.7 The preparation of the proposed layout was informed by consultation with Helen Pressley, a planning officer for Bury Council, during pre-application discussions.
- 3.8 The priorities for trees within the proposed development include retention where possible and enhancement of the local area treescape and biodiversity value through use of a 2:1 replacement planting ratio for each tree lost or other measures that would achieve this. Measures to improve passive surveillance of a footpath along the southern boundary by thinning or pruning trees are also desirable.
- 3.9 The results of the tree survey have influenced the proposed layout through a process of iteration. In particular, the alignment of drainage has been designed to minimise impacts to trees, as well as the siting, orientation and scale of the main building, arrangement of housing and car parking, and soft landscaping.

Tree Removal

- 3.10 This section details all tree removal which is proposed as part of the development. All trees not identified for removal can be retained in accordance with BS 5837. Planning decisions should ensure that existing trees are retained wherever possible⁴¹.
- 3.11 In total, five individual trees and one tree group comprising approximately 0.03ha would be removed. The total canopy cover proposed for removal, inclusive of individual trees and tree groups, equates to approximately 0.041ha.
- 3.12 All trees proposed for removal appear to be located within the application boundary.

Table 5 Reference number and location of features that would be removed

	Trees	Groups	Woodland	Hedgerow
Remove	T2; T8; T9; T10; T22	G1	N/A	N/A

- 3.13 If planning permission is granted with reference to this report, the removal of any feature not listed above and shown on Drawing 2 for removal may constitute a material amendment and may therefore require further permission⁴².
- 3.14 The following table provides an overview of the quantity and the percentage of trees that would be removed and a breakdown of the number of instances of removal by quality category. The total (gross) areas may be higher than the absolute area of tree cover on the site due to overlap between adjacent features.

Table 6 Quantity and percentage of trees that would be removed

Feature	Number of features affected				
	Category A	Category B	Category C	Category U	Hedges
Trees	0	0	4	1	0
Groups	0	0	1	0	
Woodland	0	0	0	0	
Total loss	0ha	0ha	0.0408ha	0.0005ha	0m
Proportion of existing	0%	0%	75.15%	41.67%	0%

⁴¹ NPPF paragraph 131

⁴² E.g. Town and Country Planning Act s.73

- 3.15 Tree removal is primarily associated with the construction and garden space of plots 1 and 4 (T2 and G1) and to accommodate the proposed installation of drainage (T8-T10 and T22). These trees are all either of low quality (Category C) or poor quality (Category U). The drainage alignment has been designed to minimise tree removal, but it is inevitable that this must be installed through G5 because of topography and to connect into the existing sewer. The removal of small trees that are internal to G5 will not have a significant impact on the appearance or quality of the group and they can be replaced by new planting and natural regeneration.
- 3.16 The most significant loss from an arboricultural perspective is the proposed removal of T2 and G1, which will result in a loss of screening (G1) and a small loss of amenity (T2). The trees are of low quality, but they are visible from public vantages and adjacent properties. Retention of T2 would be possible but it would dominate the garden of Plot 4 and be likely to be removed by future occupants. Therefore it is shown as removed on Drawing 2.

Tree Canopy Pruning

- 3.17 During pre-application discussions, the Council raised concerns regarding the future security of ground floor apartments adjacent to the public footpath that spans the south-western boundary. In response to this, pruning works to trees within group G6 and tree T5 are proposed. This comprises crown lifting of T5 and the larger holm oak trees within G6 to ensure their lower canopies are above the boundary fencing and remove possible climbing aids. Removal of the poor quality natural regeneration beneath the larger trees is also proposed to improve light penetration and natural surveillance. A new mixed broadleaved hedge would be planted to replace the removed trees, which would be managed to maintain an appropriate level of screening and privacy.
- 3.18 Minor canopy pruning may be required to trees T11 to T14 during drainage installation works within G5 to facilitate access. This should be detailed within an Arboricultural Method Statement (AMS).

Special Construction Methodology

- 3.19 Within the layout, there are instances of tolerable incursions into the RPA of retained trees. These comprise the proposed footpath/patio around plot 4 which encroaches into the RPA of T3 and the installation of drainage within G5 (inclusive of trees T11 to T18). These features can be retained through sensitive excavation and root pruning as required.
- 3.20 Root pruning, where necessary, will be undertaken to ensure clean severance of roots and to ensure further or more significant damage does not occur during construction. All excavation and root pruning should be completed under an arboricultural watching brief and should be detailed within an AMS. The locations of root pruning and drainage installation are shown at Drawing 3.

Effects on designated or protected features

Tree Preservation Order

- 3.21 The proposed development would not result in the removal of TPO trees.

- 3.22 The existence of the TPO should not add weight or any requirement for mitigation beyond that which would otherwise exist in respect of trees which are included in it.
- 3.23 The proposed development will not result in an increased likelihood of applications to prune or remove TPO trees in the future.

Habitats of Principal Importance

- 3.24 Loss of or harm to a Habitat of Principal Importance, without mitigation, constitutes an adverse effect that is likely to be regarded by the consenting authority as contrary to its duty to conserve biodiversity.

Deciduous Woodland

- 3.25 The proposed development would not result in loss or harm of Deciduous Woodland (broadly contiguous with part of G4).
- 3.26 Clearance of undergrowth was undertaken during design development to allow for topographical surveying. However, this area can be left to regenerate following development and no long-term detriment is anticipated. Some tree planting is proposed in this area to increase canopy cover.

Protected Species

- 3.27 The effects of the proposed development on protected species and significance thereof are considered by the relevant ecology reports including the Ecological Impact Assessment (EclA) report (ref: 10188.002).

4.0 Mitigation

- 4.1 This section describes opportunities to mitigate or offset adverse effects described by the previous section. It summarises measures that are part of the proposed development and which are relied upon by this report, and measures that are not proposed but could be secured by planning condition or agreement. Conclusions are drawn regarding overall effects, and the requirements that should be imposed in order to secure the outcomes that are described.
- 4.2 The table below provides an overview of effects on the receptors described in the preceding sections.

Table 7 Summary of effects and mitigation associated with the proposed development

Receptor	Would this proposal have any adverse effect*?	Is mitigation or offsetting proposed in detail now?	Is it <i>possible</i> to mitigate or offset effects in the site?	What net effect would be secured via consent?
Canopy cover	Yes	Yes	Yes	Positive
Tree condition ⁴³	Yes	No	Yes	Pending
Deciduous Woodland	No	N/A	N/A	Neutral

**Without mitigation*

- 4.3 **Positive** residual effects represent benefits that would be delivered by the proposed development.
- 4.4 **Neutral**⁴⁴ residual effects are those that should have no weight in decision making.
- 4.5 **Negative** residual effects cannot be mitigated or offset and represent adverse effects of the proposed development. They may be acceptable in the planning balance on consideration of other benefits delivered by the proposed development.
- 4.6 **Pending** residual effects are those for which mitigation or offsetting can be secured after consent has been granted, typically by planning condition. It is assumed by this report that they would be.

Proposed measures

- 4.7 The following measures are proposed and would be secured by a planning permission referencing and requiring compliance with this report.

⁴³ In this context, whether there would be a risk of harm to remaining trees during development (without protection)

⁴⁴ Including negligible and non-material effects

Layout

- 4.8 The retention of trees that has been assessed as possible within the proposed layout would be observed by the developer and all appointed contractors; tree removal would be limited to that illustrated on Drawing 2.

Level changes

- 4.9 Level changes would be as per the Preliminary Site Levels Plan (drawing ref: 23-B-13947-100). No level changes are proposed that would harm any retained tree.
- 4.10 Once a finalised version of proposed ground level changes is available, this should be reviewed by an arboriculturist to ensure that no additional impacts will occur to retained trees.

Drainage

- 4.11 The installation of drainage would be as per the Preliminary Drainage Plan (drawing ref: 23-B-13947-200, Rev A). None are proposed that would harm any retained tree provided that drainage installation within G5 is completed under an arboricultural watching brief and the methodology detailed within an AMS.
- 4.12 Once a finalised version of proposed drainage changes is available, this should be reviewed by an arboriculturist to ensure that no additional impacts will occur to retained trees.

Planting

- 4.13 Tree removal would comprise 5 individual trees and 1 tree group equating to c. 0.03ha of canopy cover.
- 4.14 New planting is proposed and detailed on the Planting Plan (drawing ref: D10188.202). It includes a mix of native and ornamental, small and medium to large growing tree species and native and ornamental hedgerow planting.
- 4.15 46 trees and c. 226m of hedgerow planting, of which c. 98m is mixed native hedgerow, are proposed on the Planting Plan.
- 4.16 The proposed planting comprises more trees than would be removed. There would also be hedgerow planting undertaken as part of the planting scheme. There would therefore be a permanent net gain in tree cover and hedgerow by the time the new trees are established and once hedgerow planting begins to interlink and be brought into hedgerow management.
- 4.17 The planting scheme includes a greater range of species than would be removed and therefore would enhance biodiversity in this respect.
- 4.18 The average mature size of tree species on the site would be unaffected by the proposed development and planting scheme.
- 4.19 The distribution and connectivity of tree cover would be improved by the proposed development and planting scheme and would increase tree cover internally within the site which is relatively bare of vegetation at present.
- 4.20 Proposed streets would be tree-lined in accordance with NPPF.

- 4.21 Provision should be made for the maintenance of new planting in accordance with British Standard 8545:2014 Trees: from nursery to independence in the landscape - Recommendations, and replacement of failures for a period of at least 5 years.

Tree works

- 4.22 The works proposed would be undertaken by a qualified contractor in accordance with British Standard 3998:2010 Tree work – Recommendations.

Recommended measures

- 4.23 The following measures should be secured by planning condition or other agreement.

Arboricultural Method Statement

- 4.24 An Arboricultural Method Statement should be produced in accordance with BS5837. It should include:

- (i) A Tree Protection Plan showing trees that would be retained in the context of the final layout
- (ii) The arrangement of temporary protection measures that would be installed prior to commencement and maintained during construction
- (iii) The location of all proposed demolition, structures and surfaces, level changes, excavations and access requirements that could harm retained trees
- (iv) A methodology and/or details for all activities identified at point (iii) that will be followed to avoid harm to retained trees
- (v) A detail for any temporary construction measures, products or construction methods that are specified
- (vi) Details of any proposed watching brief, monitoring or reporting

- 4.25 The scope of the Arboricultural Method Statement and the locations of activities that cannot be completed without it is illustrated on an Arboricultural Method Statement Heads of Terms Plan at Drawing 3.

Tree locations

- 4.26 The locations of all retained trees that are approximate in this assessment⁴⁵ should be resolved accurately via a topographical survey and all relevant drawings updated. If this changes any of the conclusions or recommendations of this assessment, it should also be updated.

Level change, utilities and drainage

- 4.27 There should be no level change, or installation of buried utilities or drainage within any Root Protection Area⁴⁶ unless it can be demonstrated within the AMS that this will be done without deterioration in tree condition.

⁴⁵ See Appendix A and Drawings

⁴⁶ As per Drawing 2

APPENDIX A: Arboricultural Survey Data



Surveyor Paul Jones
 Survey Date 24/10/23 and 15/04/24
 Site Fletcher Fold Road, Bury
 Drawing Ref D10188.01.001

Italicised Feature Ref: Inspection of this feature was restricted
Italicised Values: Feature value was estimated

APPENDIX A: Arboricultural Survey Data Sheets

Ref	Species	Height	Canopy Ground Clearance	Stem Diameter (or range)	No. of stems/ individuals	Crown Spread North	Crown Spread South	Crown Spread East	Crown Spread West	Lowest Branch Height	Lowest Branch Direction	Maturity	Condition	Comments on form, condition, health and significant defects	Management recommendations in current context	BS 5837 Quality Category	Estimated Remaining Contribution
		(m)	(m)	(mm)	arising below 1.5m	(m)	(m)	(m)	(m)	(m)	(N,S,E,W)	Young, Middle Age, Mature	Good, Fair, Poor, Veteran			A,B,C,U (1,2,3)	Long, Medium, Short, Very Short
Trees																	
T1	Goat willow	13.0	5.0	600	1	7.0	6.0	7.0	7.0	4.0	E	Middle Age	Good	Semi large goat willow close to the site boundary. Access restricted due to protective fencing. Tree has full crown with no obvious defects. A well established tree amongst a group of smaller self sown trees.		B ,2	Medium
T2	Wild cherry	10.0	4.0	474	3	5.0	4.0	6.0	4.0	3.5	N	Middle Age	Fair	Access restricted due to protective fencing. Trees main stems are heavily obscured by ivy, despite this the tree has good canopy spread with some slight areas of decline/dieback visible in the top of the canopy.		C ,2	Medium
T3	Wych elm	15.0	10.0	900	1	5.0	5.0	5.0	5.0	4.0	N	Mature	Good	Large third party Elm tree in private garden. Tree is in influencing distance due to large stem diameter. Tree had good form and is dominant in the canopy. Possible Dutch elm disease resistance as little dieback visible.		A ,1	Medium
T4	Sycamore	15.0	4.0	940	1	5.0	7.0	5.0	6.0	1.5	N	Mature	Good	Large sycamore with full crown and good form. Multi stemmed at 2m. No signs of decline except for small amount of tar spot throughout.		A ,1, 2	Long
T5	Holm oak	13.0	5.0	610	2	6.0	4.0	6.0	5.0	3.0	N	Mature	Good	Large Holm oak with excellent form. Twin stemmed at 0.5m. Full healthy crown with no obvious defects.		B ,1	Long
T6	Bird cherry	15.0	6.0	780	1	5.5	7.0	8.0	7.0	3.0	E	Mature	Good	A large cherry tree positioned outside the site boundary but within influencing distance due to stem diameter. Tall narrow form and large leading branches. No obvious defects.		B ,2	Medium
T7	Wild cherry	11.0	3.0	562	2	5.5	7.0	4.0	7.0	2.5	W	Mature	Good	Tree is positioned outside the site boundary in a car park of a small housing estate at the intersection of 2 public footpaths. Multi-stemmed at 0.5m. Long reaching branches make for a good full crown with no signs of decline or dieback evident.		B ,2	Medium
T8	Common hawthorn	6.0	4.0	150	1	1.0	1.0	2.0	0.5	3.0	N	Middle Age	Poor	Declining tree positioned close to site boundary. Main stem has previously failed. Previous branch failure present. Little active growth remaining within canopy.		C ,2	Short
T9	Common hawthorn	9.0	4.0	140	1	2.0	3.0	3.0	2.0	3.0	S	Middle Age	Fair	Positioned next site boundary. Canopy is suppressed by neighbouring trees. Vigour appears good. No obvious defects or areas of dieback.		C ,2	Medium
T10	Common hawthorn	6.0	4.0	160	1	0.5	2.0	0.5	2.0	2.0	S	Middle Age	Poor	Declining tree positioned next to site boundary. Large amounts of decay present on main stem. Canopy is suppressed by neighbouring trees. Very little active growth remaining in canopy.		U	Very Short
T11	Common hawthorn	9.0	4.0	130	1	3.0	2.0	2.0	3.0	2.0	SW	Middle Age	Fair	Positioned next to the site boundary. Ivy covering much of main stem. Suppressed canopy but has a better canopy spread than similar trees in the same area. Epicormic growth present throughout.		C ,2	Medium
T12	Common hawthorn	10.0	5.0	230	1	5.0	3.0	3.0	1.0	4.0	E	Middle Age	Good	Dominant tree within group of hawthorns at edge of site. Ivy on much of main stem. Good crown spread and vigour compared to others in area. Small amount of dieback in lower section of canopy. Main stem is leaning to the east.		B ,2	Long
T13	Wild cherry	17.0	14.0	286	2	4.0	3.0	4.0	4.0	4.0	E	Middle Age	Good	Twin stemmed at base but with a main leading stem and a smaller secondary stem. Dominant tree within area. Vigour is good with tall narrow form but top section of canopy is more spreading.		B ,1, 2	Long
T14	Goat willow	14.0	6.0	290	1	5.0	3.0	5.0	0.5	3.0	E	Middle Age	Good	Leaning heavily to the east. Small section of decay to the outer bark visible. Vigour appears good. Canopy suppressed slightly by neighbouring trees.		B ,1, 2	Long
T15	English holly	9.0	4.0	190	1	2.0	2.0	3.0	3.0	3.0	E	Middle Age	Good	Good vigour and form. No obvious defects.		B ,2	Long
T16	Goat willow	13.0	5.0	320	1	6.0	1.0	5.0	4.0	3.0	NE	Middle Age	Fair	Leaning heavily to the North. Vigour appears low compared with other species in area. Mechanical wounds to lower section of canopy present.		C ,2	Medium
T17	Elder	8.0	4.0	214	3	3.0	0.5	3.0	0.5	2.0	N	Middle Age	Poor	Leaning heavily to the north. Epicormic growth present throughout canopy. Sections of decay visible to the outer bark. Previous branch failures present. canopy suppressed by neighbouring trees.		C ,2	Short
T18	Wild cherry	10.0	6.0	170		2.0	3.0	3.0	3.0	3.0	N	Middle Age	Good	Tall narrow form. Mechanical damage to base of main stem. Vigour appears okay.		C ,1, 2	Medium



APPENDIX A: Arboricultural Survey Data Sheets

Surveyor Paul Jones
 Survey Date 24/10/23 and 15/04/24
 Site Fletcher Fold Road, Bury
 Drawing Ref D10188.01.001

Italicised Feature Ref: Inspection of this feature was restricted
Italicised Values: Feature value was estimated

Ref	Species	Height	Canopy Ground Clearance	Stem Diameter (or range)	No. of stems/ individuals	Crown Spread North	Crown Spread South	Crown Spread East	Crown Spread West	Lowest Branch Height	Lowest Branch Direction	Maturity	Condition	Comments on form, condition, health and significant defects	Management recommendations in current context	BS 5837 Quality Category	Estimated Remaining Contribution
		(m)	(m)	(mm)	arising below 1.5m	(m)	(m)	(m)	(m)	(m)	(N,S,E,W)	Young, Middle Age, Mature	Good, Fair, Poor, Veteran			A,B,C,U (1,2,3)	Long, Medium, Short, Very Short
T19	Wild cherry	10.0	6.0	200	1	1.5	4.0	3.0	3.0	4.0	E	Middle Age	Good	Good spreading firm and good vigour. Positioned in close proximity to site boundary. No obvious defects.		B ,1, 2	Long
T20	Wild cherry	16.0	8.0	483	2	4.0	5.0	6.0	6.0	4.0	W	Mature	Good	Twin stemmed at base. Dominant tree in area. Tall narrow form with bottom section of canopy more spreading. Vigour appears good.		B ,1, 2	Long
T21	Wild cherry	16.0	6.0	370	1	4.0	5.0	4.0	3.0	6.0	S	Middle Age	Good	Positioned on site boundary with tree growing in very close proximity to boundary fencing. East Side of canopy encroaching over into neighbouring property. Good form and vigour no obvious defects but stem may become enclosed around fencing over time.		B ,1, 2	Long
T22	Elder	5.0	3.0	156	2	3.0	3.0	2.0	3.0	2.0	S	Middle Age	Fair	Bushy form. Positioned close to site boundary next to private residence. Areas of dieback present throughout canopy. Twin stemmed at base.		C ,2	Medium
T23	Sycamore	15.0	8.0	290	1	3.0	3.0	3.0	2.0	4.0	W	Middle Age	Good	Tall narrow form. Vigour appears good. No obvious defects. Positioned in area of trees growing in close proximity to each other.		B ,1, 2	Medium
T24	Grey poplar	15.0	10.0	210	1	3.0	2.0	1.0	3.0	5.0	W	Middle Age	Fair	Tall narrow form. Reduced vigour compared to other trees within area. Reduced canopy size compared to other trees in area.		C ,2	Medium
T25	Goat willow	11.0	8.0	366	4	2.0	3.0	3.0	4.0	3.0	N	Middle Age	Fair	Multi-stemmed at base. Main stems engulfed in ivy. New buds visible but extent of vigour unclear. Tall narrow form		C ,2	Medium
T26	Elder	6.0	4.0	110	1	2.0	1.5	2.0	0.5	2.0	W	Middle Age	Poor	Tree has previously failed at its base and regeneration growth is now the main structure of the tree. Epicormic growth throughout. Branch failures present throughout.		U	Very Short
Groups																	
G1	Sycamore, Common hawthorn, Bird cherry, Elder	7 to 8	2.5	80 to 200	30							Young to Middle Age	Good	Group of trees acting as a screen from the properties behind to the site. All young to middle age and developing well.		C ,2	Long
G2	Italian alder	8 to 8	2.0	250 to 300	2							Middle Age	Fair	Access restricted due to protective fencing. Both trees have good conical form. Alder beetle defoliation present on both.		B ,2	Medium
G3	Italian alder, Common alder, Silver birch, Sessile oak, Elder	6 to 18	4.0	80 to 400	22							Middle Age to Mature	Mixed	Group of trees growing on top of an embankment with a retaining wall on the side of the site. Mostly larger more established trees with some smaller self sown in amongst. All trees are developing well with some large alders amongst the group. Alder beetle defoliation present and some birch showing signs of decline, with one dead birch within group. Inspection restricted due to protective fencing.		B ,2	Long
G4	Sycamore, Common hawthorn, Common ash, English holly, Scots pine, Elder	2 to 15	5.0	80 to 450	70							Mixed Age	Good	Group of trees positioned between the site boundary and private residence behind. Some well established ash and sycamore amongst group with lots of smaller self sown trees present. Large amount of bamboo present which seems to have grown out from private residence. No signs of ADB in ash trees and generally health of group appears good.		B ,2	Long
G5	Sycamore, Silver birch, Wild cherry, Goat willow	6 to 16	3.5	80 to 400	80							Middle Age	Mixed	Group of mostly middle aged trees with some established cherry and birch within the group. Group is set on a small incline leading down to the rear of private residences with a public footpath to the south. Some areas of dieback in sycamores amongst group but other than that health of group appears good. To the south east of the group close to the fencing that separates from the public footpath there are some failed trees and some trees with branch failure present.		B ,2	Long
G6	Silver birch, Common hawthorn, Wild cherry, Holm oak, Goat willow	8 to 13	2.0	80 to 400	80							Mixed Age	Good	Group of trees that screens the site from the houses behind. Public footpath runs through middle of group outside of the site boundary. Trees on other side of the footpath fall outside of the boundary but are within influencing distance. Smaller tree developing well. Some areas of dieback present within cherry's in group.		B ,2	Long

APPENDIX B: Survey Method

Limitation

Trees are dynamic living organisms with a constantly changing structure; even healthy trees can change or decline. Survey information is presented as being correct at the time of survey. Limitations to the reliability of the survey data are noted within Appendix A and the main report text.

Scope

All woody vegetation with a stem diameter exceeding 75mm is recorded. Below this threshold, vegetation may also be recorded at the discretion of the surveyor. The survey includes woody vegetation within a defined boundary, and on adjacent land where the characteristics, location or context of the tree mean that activity within the boundary could affect the tree, or be influenced by it. This is typically up to 15m outside the boundary.

Resolution

Vegetation is recorded as either an individual *Tree*, *Group* of trees, *Woodland*, or *Hedgerow*. This is done at the discretion of the surveyor to provide a useful resolution to the survey data, to differentiate between features with varying attributes and group those with common attributes, and collective value or function.

Typically, *Trees* are recorded where they are arranged separately; different from adjacent trees; or where the assessment would benefit from greater detail. *Groups* are coherent arboricultural features comprising trees with a collective form, function, history or management opportunities. *Woodland* is recorded where areas of tree cover have the qualities of a woodland habitat, including age and species structure, natural regeneration, and associated non-arboreal features. *Hedgerow* describes linear features largely comprising woody vegetation that are under, or could be returned to, regular hedgerow management. It should be noted that these terms are also used in other assessment types, sometimes with different definitions.

Tree locations

The location of trees is based on stem locations and canopy spreads taken from a topographical survey, where available. Where this information is not available, this is noted in Appendix A and locations should be regarded as approximate. Approximate locations are based on one or more of: GPS data captured during the survey; aerial photographs; and measurement from known points of reference. Approximate stem locations are typically accurate to within a few metres. Stem locations are shown for all *Trees*.

Groups, *Woodland* and *Hedges* are principally described in terms of their canopy outline, although stem locations may also be shown. Individual tree canopy outlines are projected on Drawings based on measurements taken as described below (see Crown Spread). *Groups*, *Woodland* and *Hedges* canopy outlines are projected based on the same hierarchy of source data as stem locations.

Tree survey

The survey is conducted from ground level by an arboriculturist, taking account of the tree, and its context. The nature of the soil is not assessed. Non-invasive assessment tools may be used as appropriate, including hypsometer, measuring tape, probe and nylon mallet.

The following attributes are recorded for each feature (see Arboricultural Survey Data Sheets at Appendix A):

Reference Number	A unique code per feature, typically but not necessarily a chronological sequence, in the form <i>Tn</i> for <i>Trees</i> ; <i>Gn</i> for <i>Groups</i> ; <i>Wn</i> for <i>Woodlands</i> ; and <i>Hn</i> for <i>Hedgerows</i>
Species	The common name is given. All species are listed for <i>Groups</i> , <i>Woodland</i> and <i>Hedgerows</i> . The Latin name may also be given if further clarification is required.
Height	Top height recorded in metres, or the range for <i>Groups</i> , <i>Woodland</i> and <i>Hedgerows</i>
Canopy Ground Clearance	The height of the canopy above ground level in metres
Stem Diameter	A measurement taken at 1.5 metres above ground level, or the nearest representative point below, in millimetres. For multi-stemmed trees a single figure is calculated according to BS5837 4.6. For <i>Groups</i> , <i>Woodland</i> and <i>Hedgerows</i> , the range of diameters

No. of Stems / Individuals	The number of stems arising below a height of 1.5 metres, or for <i>Groups</i> , <i>Woodland</i> and <i>Hedgerows</i> an estimate or count of the number of trees
Crown Spread	Radial branch spread in metres at cardinal points (N, S, E, W) from the location of the <i>Tree</i> stem at ground level (for <i>Groups</i> , <i>Woodland</i> and <i>Hedgerows</i> , see <i>Tree Locations</i>)
Lowest Branch Height	The height of the first significant branch at the point of attachment (<i>Trees</i> only)
Lowest Branch Direction	The direction of growth of the first significant branch from the point of attachment (<i>Trees</i> only)
Maturity	Classification describing age relative to the species, and size and growth potential, in order to inform management decisions • Young means small and/or recently planted and could be relocated, or replaced on a like for like basis • Middle Age means established and independent, within the growth stage of life, and with potential to continue increasing in height and/or spread • Mature means having reached ultimate height and/or spread, given the location and surroundings; further increases will be slow or limited • Mixed Age (<i>Groups</i>, <i>Woodland</i> and <i>Hedgerows</i> only) means comprising all three maturity classes
Condition	An overall assessment of a feature's physiological and structural state, informing longevity and quality categorisation, and supported by <i>Comments</i> • Good condition means with vitality and resilience commensurate with species and age, and without significant defects or pathogens • Fair condition means with tolerable reduction of vitality and resilience, and/or remediable or tolerable defects and/or pathogens • Poor condition means with declining or significant loss of vitality and resilience, and/or significant and irreparable defects and/or pathogens • Dead condition means without photosynthetic or metabolic capacity, or moribund and in imminent terminal decline • Mixed (<i>Groups</i> and <i>Woodland</i>) means comprising more than one condition class • Veteran means trees of exceptional value, meeting recognised criteria including age, size and characteristics. Classification is partly informed by the sustained presence of structural defects, physiological decline, and pathogens, and their contribution to biodiversity. Undesirable characteristics in ordinary trees may be desirable in veteran trees, therefore <i>Veteran</i> can be understood as a superlative <i>Condition</i> that supersedes other categories (excluding <i>Dead</i>).
Comments	A description of all significant characteristics of the feature and its context that are not described by other attribute fields; including observations to support the classification of <i>Condition</i> , <i>Quality Category</i> and <i>Estimated Remaining Contribution</i> as appropriate
Management Recommendations	Recommendations for arboricultural works based on the current land use, in the interests of good arboricultural practice. These are incidental to the primary survey purpose, and not a comprehensive schedule in pursuit of any particular objective.
BS 5837 Quality Category	Tree quality assessment based on Table 1 of BS 5837:2012 (see below) comprising quality categories A , B , C and U and sub-categories 1 , 2 and 3
Estimated Remaining Contribution	A forecast of the durability of the feature in its current form and context, and therefore the reliance that can be placed on any benefits or functions it provides. This is influenced by <i>Species</i> and <i>Condition</i>, and is not necessarily a forecast of life expectancy. • Long means more than 40 years • Medium means 20 to 40 years • Short means 10 to 20 years • Very Short means less than 10 years

Table 1 Cascade chart for tree quality assessment

Category and definition	Criteria (including subcategories where appropriate)			Identification on plan
Trees unsuitable for retention (see Note)				
Category U Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	- 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 <i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i>			See Table 2
	1 Mainly arboricultural qualities	2 Mainly landscape qualities	3 Mainly cultural values, including conservation	
Trees to be considered for retention				
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)	See Table 2
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	See Table 2
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	See Table 2

Table 1: Extract from **British Standards Institution (2012) BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations**, page 9

Note on Root Protection Areas:

Data is captured during the survey to inform the design of Root Protection Areas (RPA). These are a design tool, representing the area around a tree in which restrictions to some activities may be required to avoid significant harm, particularly to roots and soil. The RPA is a function of *Stem Diameter*, and additional considerations including management history, barriers to root growth, topography, ground conditions and tree characteristics. These factors are combined by an arboriculturist to produce a buffer zone for each feature from which the exclusion of construction activities would ensure the continued reliability of the survey data at Appendix A, including *Condition*, *BS 5837 Quality Category* and *Estimated Remaining Contribution*.

For *Trees*, RPA is defined as a circle with a radius 12 times the *Stem Diameter*, which may be modified to reflect the considerations above.

For *Groups* and *Woodland* RPA is based on the size and location of peripheral constituent trees, and presented as an offset from the canopy edge giving equivalent or greater protection to all trees of any size, or modified to reflect significant variation in constituent tree sizes and/or the considerations above.

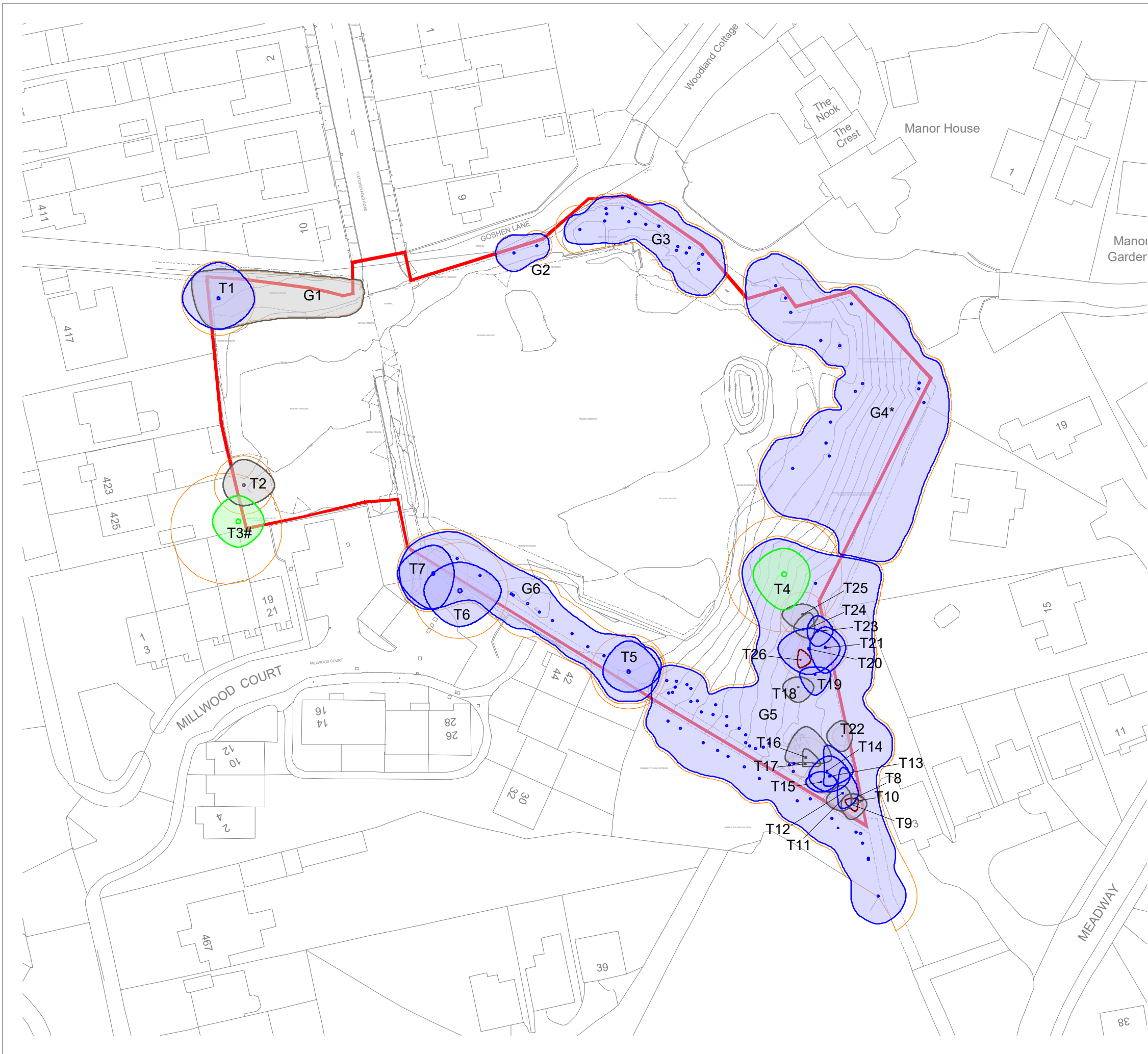
For *Hedgerow*, no RPA is shown. Typically, hedgerow requires a smaller stand-off than trees due to reduced crown dimensions. Any stand-off should include sufficient space for access and ongoing management and should therefore normally be based on the canopy spread rather than root spread.

DRAWINGS

Drawing 1 – Tree Constraints Plan

Drawing 2 – Tree Works Plan

Drawing 3 – Arboricultural Method Statement Heads of Terms Plan



KEY

[This drawing must be reproduced in colour]

- T1/G1/W1 Trees
- Root Protection Area (RPA)
- Site Boundary
- # Approximate location
(Feature not shown on supplied topographical survey)
- * Tree Preservation Order No. 160
(2 individual trees within TPO; T11 and T14 - see note below)

Tree Quality Categorisation
(Based on BS 5837:2012 Trees in relation to design, demolition and construction - Recommendations)

- Category A
(High quality)
- Category B
(Moderate quality)
- Category C
(Low quality)
- Category U
(Unsuitable for retention)

NOTES:

This drawing should be read in conjunction with the respective Arboricultural Survey Data (Appendix A).

Stem locations shown within groups are based on topographical survey information and do not include all stems.

Two trees within TPO Number 160 (T11 and T14 of the Order) are situated to the north-east and east of group G4. These appear to be located on third party land, but included within the canopy of the group. Their exact locations would need to be verified if trees within the group were proposed for removal within any development proposals.



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A	Additional stem locations within tree groups; site boundary	TDP	HEE	23/04/24
Rev	Description	Drawn	Approved	Date



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Title
Drawing 1: Tree Constraints Plan [BASELINE]

Drawing Number
D10188.01.001

Drawn	Checked	Approved	Scale	Date
PJ	TDP	TDP	1:750 @ A3	07/11/2023



KEY

[This drawing must be reproduced in colour]

- T1/G1/W1 Trees
- Root Protection Area (RPA)
- Site Boundary
- # Approximate location (Feature not shown on supplied topographical survey)
- * Tree Preservation Order No. 160 (2 individual trees within TPO; T11 and T14 - see note below)

Trees to be retained and protected

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Category U (May be retained for habitat value)

Proposed tree works

- Trees to be removed (Canopy outline denotes tree quality category)
- Trees to be pruned (Canopy outline denotes tree quality category; see Section 3.0 of AIA report 10188.01.001 for details)

NOTES:

This drawing should be read in conjunction with the respective Arboricultural Survey Data (Appendix A).

Stem locations shown within groups are based on topographical survey information and do not include all stems.

Two trees within TPO Number 160 (T11 and T14 of the Order) are situated to the north-east and east of group G4. These appear to be located on third party land, but included within the canopy of the group. Their exact locations would need to be verified if trees within the group were proposed for removal within any development proposals.



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Rev	Description	Drawn	Approved	Date
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Title
Drawing 2: Tree Works Plan [EFFECTS]

Drawing Number
D10188.01.002

Drawn	Checked	Approved	Scale	Date
PJ	HEE	TDP	1:750 @ A3	25/04/2024

Arboricultural Method Statement
Heads of Terms

Construction activities proposed within the Root Protection Area of retained trees based on the proposed layout are highlighted opposite. Further information and assessment on the following elements will be required in the form of an Arboricultural Method Statement, as a minimum, to ensure adequate protection is afforded to trees during and post construction.

- (a) An arboriculturist should be appointed to prepare the Arboricultural Method Statement prior to development commencement. They may thereafter be required to supervise certain activities as specified by the Method Statement.
- (b) Detailed methods should be specified for the implementation of construction in proximity to retained trees determined in consultation with other project specialists including:
 - (b)a) Root pruning to tree T3 around footpath of plot 4
 - (b)b) Drainage installation through group G5 and in close proximity to trees T11 to T14
- (c) The build programme and site logistics plan should be reviewed in relation to retained trees.
- (d) Finalised utilities and drainage information should be reviewed in relation to retained trees.
- (d) Finalised levels information should be reviewed in relation to retained trees.
- (e) The alignment and specification of temporary protection measures for the satisfactory retention of trees during the build phase (barrier fencing and ground protection) should be specified.
- (f) Details of general precautions that should be exercised during the construction phase to minimise impact on retained trees should be provided.
- (g) A system of monitoring and compliance of contractor performance, materials and workmanship according to the AMS should be established.
- (h) The AMS should be submitted to the local planning authority for approval and implemented in full.



KEY
[This drawing must be reproduced in colour]

- T1/G1/W1 Retained Trees
- Root Protection Area (RPA)
- Site Boundary
- # Approximate location
(Feature not shown on supplied topographical survey)
- * Tree Preservation Order No. 160
(2 individual trees within TPO; T11 and T14 - see note below)

Special Construction Methodology Requiring AMS

- Root pruning
- Drainage installation

NOTES:
Stem locations shown within groups are based on topographical survey information and do not include all stems.

Two trees within TPO Number 160 (T11 and T14 of the Order) are situated to the north-east and east of group G4. These appear to be located on third party land, but included within the canopy of the group. Their exact locations would need to be verified if trees within the group were proposed for removal within any development proposals.

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Title
Drawing 3: Arboricultural Method Statement Heads of Terms Plan [EFFECTS]

Drawing Number
D10188.01.003

Drawn	Checked	Approved	Scale	Date
PJ	HEE	TDP	1:750 @ A3	25/04/2024



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