



THE
ENVIRONMENT
PARTNERSHIP



HOLLIN CROSS FARM BURNLEY ARBORICULTURAL IMPACT ASSESSMENT OCTOBER 2021

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Executive Summary

1. TEP has been commissioned by Prospect (GB) Ltd to conduct a survey of land at Hollin Cross Farm in Burnley and a review of designations, policies and other instruments of relevance to arboriculture. This report presents the results and effects of proposed development.
2. 18 individual trees (T1-T18); 17 groups of trees (G1-G17); and 4 hedges (H1-H4) were recorded within influencing distance of the application site.
3. The tree population comprises predominantly middle aged broadleaf species in either fair or good condition. These are primarily located around the site fringes with only a small amount of individual trees and groups located internally. Species include common hawthorn, Norway maple, sycamore, goat willow and horse chestnut.
4. The desktop review and site survey identified no Tree Preservation Orders; no trees within a Conservation Area; no ancient woodland; no veteran trees; no trees within a Community Forest; and no arboreal Habitats of Principal Importance.
5. The proposed development comprises the construction of 200 residential dwellings with associated access road, footways, drainage and landscaping.
6. 5 individual trees and 8 tree groups (equating to approximately 0.1197ha grouped canopy cover) would be removed in full or part to accommodate the proposed development. Of these, 2 trees are located outside of the application boundary.
7. The development would give rise to no adverse effects that cannot be mitigated.
8. New planting is proposed and detailed on the Soft Landscape Proposals. This includes 237 trees, predominantly with a small to medium ultimate size, and includes a variety of ornamental and native species. There is also approximately 439m of native species hedgerow and 1481m ornamental species hedgerow planting proposed. The development would result in a net gain of tree cover, although the function of these trees would be fundamentally different to those removed, due to the wider distribution, reduced connectivity, and changes to the species mix and size of the proposed trees. There would therefore be a reduction in the arboreal biodiversity in this respect but an increase in the canopy cover and amenity of the tree population. There would be a significant net gain of hedgerow across the site.
9. Tree protection measures to be observed during construction should be provided, and detailed in an Arboricultural Method Statement.
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. 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 Prospect (GB) Ltd to conduct an arboricultural survey of land at Hollin Cross Farm in Burnley 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 survey was undertaken in August 2021 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: PRO.TS.13). 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.

Limitation

- 1.6 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 foundations; management of tree risk; and tree-related subsidence.
- 1.7 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. After this, it would be necessary to review baseline data and conclusions to ensure reliability.
- 1.8 Where the recommendations of this report have been followed, any future deterioration in tree condition shall not be attributable to the development.

¹ Estimated feature locations are marked on Drawing 1

² Limitations to the survey are described at Appendix A

2.0 Baseline

The Site

- 2.1 The site is located adjacent to Hollin Cross Farm with Glen View Road to the north, Woodplumpton Road to the east and Wilkie Avenue and the Burnley Golf Club Access Road to the west. An access road to the farm also intersects the site to the west, separating the eastern and western fields. It is circa 8.86ha in size and is centred approximately on grid reference SD 83745 30728.
- 2.2 The site is currently in use as an active farm with livestock in the fields. The topography of both land parcels is undulating and both slope generally from south down to the north. The western and smallest land field is a pasture field, whereas the eastern and largest field has several interlinked watercourses throughout and the ground conditions are very wet and boggy.



Figure 1 Site location and approximate boundary (OS Open Map – Local (Raster) 1:10,000)

Contains Ordnance Survey data © Crown copyright and database right 2021

Tree Survey

- 2.3 18 individual trees (T1-T18); 17 groups of trees (G1-G17); and 4 hedges (H1-H4) were recorded within influencing distance of the application site.
- 2.4 Feature locations, their quality categories, canopy spreads and root protection areas are shown on Drawing 1. The following table provides the total 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 of cover due to canopy overlap between adjacent features.

Table 1 Existing canopy coverage

Trees	Groups	Woodland	Hedgerow
0.0520ha	0.3383ha	0ha	79m

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

Overview

- 2.6 Trees within influencing distance of the site are predominantly located around the fringes with only 4 groups and 2 individual trees located internally. Species composition comprises primarily broadleaved species and includes common hawthorn, Norway maple, sycamore, goat willow and horse chestnut. The majority of trees are middle aged with a small amount of younger trees and their condition is variable across the site, although most features are in either fair or good condition.
- 2.7 3 trees (T11 to T13) are located offsite close to the north-western boundary. 2 of these are Norway maple (T12 and T13) and 1 is a whitebeam (T11). Of these trees, T12 is the largest and most prominent, with a stem diameter of 540mm, and is one of the most significant trees within influencing distance. It has a squat form, standing at 10m in height, but a rounded and attractive canopy form that is low lying and close to the ground.



Figure 2 Norway maple (T12) close to north-eastern site boundary

- 2.8 A dense area of trees lines the western site boundary which includes 2 further significant trees within influencing distance (T14 and T15). T14 is a horse chestnut and T15 is a sycamore, both are middle aged and are the largest trees surveyed with stem diameters of 600mm and 622mm. These trees and group G17, a dense linear group comprising predominantly hawthorn and goat willow, are situated adjacent to the Burnley golf course access road and provide screening.
- 2.9 2 third party groups (G15 and G16) are also located close to the western boundary within Burnley golf club land. G15 comprises a group of Leyland cypress forming a screen around a small outbuilding. G16 is a small cluster of birch, ash and sycamore trees within the golf course that provide some screening and have amenity value within the setting of the golf course.



Figure 3 Trees T14 and T15 and dense group G17 on western boundary

- 2.10 3 third party groups are situated on the eastern boundary, 2 of which are located within an adjacent garden (G9 and G12) and 1 of which is roadside (G8). G9 is a mixed species group that includes sycamore, hazel, hawthorn, aspen, Laburnum, goat willow and pedunculate oak. G12 comprises sycamore and beech which are the fringe trees of a wider tree group. G8 includes sycamore, alder, ash, wild cherry, goat willow and pedunculate oak. The 3 ash trees within G8 are in poor or fair condition with varying degrees of Chalara ash dieback symptoms. All 3 groups provide screening between the site and the adjacent road and property, and some areas of continuous linear habitat.



Figure 4 Part of group G9 on eastern site boundary within third party garden

- 2.11 Many of the trees on the northern and north-western boundaries are small scattered individual trees within several third party gardens. The largest and most prominent of these trees is T10, a middle age goat willow that is trifurcate at 1.5m with included and fusing stem unions. It has been pruned previously, leaving a single large piece of major deadwood in the northern canopy. The crown has some thinning and tip dieback in places.



Figure 5 Goat willow (T10) within third party garden on north-western boundary

- 2.12 Tree cover located internally within the site boundaries is limited to several groups of predominantly hawthorn in mixed condition (G4, G7, G10 and G11) and moribund or dead trees (T3, G5 and G6). Many of these trees are showing signs of dieback and have grown with squat and twisted forms due to the exposure of the site.



Figure 6 Hawthorn and elder trees within group G11 located internally within site

Tree Quality

- 2.13 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 trees within it. This information is presented by canopy area to allow comparison between features of varying size and maturity. Hedgerows have not be categorised.

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.	0.0252ha
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.	0.2086ha
C	Trees of low quality, typically with at least a short remaining life expectancy; unremarkable trees; young or small trees that could be replaced.	0.1456ha
U	Trees that cannot realistically be retained in the current land use for 10 years; with serious and irreparable defects, pathogens or decline.	0.0109ha

- 2.14 The majority of tree cover within influencing distance of the site is of moderate quality (Category B) predominantly due to the screening function and landscape value that these trees provide. The second largest proportion of canopy cover is of low quality (Category C) and have been categorised as such primarily due to their impaired condition or size and age. High quality (Category A) canopy cover within influencing distance comprises 3 individual trees which are the largest and most prominent trees surveyed. The smallest proportion of tree cover comprises Category U trees that are unsuitable for retention due to being moribund or dead.

Root Protection Areas

- 2.15 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 1.5 metres⁴. The RPA represents the minimum area around each tree that must be left undisturbed to ensure its survival.
- 2.16 Where a trees rooting pattern is considered to have been influenced by site conditions the RPA has been adjusted or offset to most accurately represent the likely spread of roots⁵. On this site influences on root morphology are considered to be compaction from livestock.

³ Refer to Appendix B for the full table

⁴ Refer to Appendix A for RPA area calculations

⁵ See Drawing 1 for RPA shapes

Policy, designations and protection

Planning Policy

- 2.17 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.
- 2.18 There should be a common sense ambition to limit tree loss to that which is strictly required 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

- 2.19 The National Planning Policy Framework (NPPF) has an overarching environmental objective. This embeds protection and enhancement of the natural environment and biodiversity in decision making⁶.
- 2.20 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 biodiversity⁷.
- 2.21 Opportunities should be taken to incorporate trees into developments, ensure appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. New streets should be tree-lined unless there are clear, justifiable and compelling reasons why this would be inappropriate⁸.
- 2.22 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.
- 2.23 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 of either should be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists¹⁰.

Local Planning Policy

- 2.24 Burnley Borough Council has an adopted Local Plan (adopted July 2018) that contains policies of relevance to trees. In particular, policies NE3 and NE4 are of relevance to trees and this site. These are recreated in full or part below.

⁶ NPPF paragraph 8 (c)

⁷ NPPF paragraph 174 (b) (d)

⁸ NPPF paragraph 131

⁹ NPPF paragraph 180 (a)

¹⁰ NPPF paragraph 180 (c)

Policy NE3: Landscape Character (part)

The Council will expect development proposals to respect and where possible, enhance and restore landscape character, as appropriate to their nature and scale. Development proposals should ensure that:

- b) They are designed and located to ensure that the health and future retention of important landscape features is not likely to be prejudiced and include provisions for the long term management and maintenance of any existing and proposed landscaping, woodlands and trees;*
- c) They avoid detrimental effects on or loss of features that make a significant contribution to the particular landscape character type, and where possible proposals should aim to conserve, enhance or restore important natural and historic landscape features such as farmsteads and barns, mills, ponds, lodges and bridges and protect historic field boundaries, including individual trees, stone walls and hedgerows that make a positive contribution to the character of the landscape type;*
- d) They maintain and extend tree cover, where practicable, through the retention of important trees, appropriate replacement of trees to be lost and new planting to support green infrastructure.*

Policy NE4: Trees, Hedgerows and Woodlands (full)

Protected trees, hedgerows and woodland

- 1) Development proposals that lead to a loss of protected trees, important hedgerows, prominent mature or aged or veteran trees or areas of mature or ancient woodland will not normally be permitted.*
- 2) The Council will consider the making of Tree Preservation Orders where trees of moderate and high quality which have a life expectancy of at least 10 years and are of visual amenity value may be affected by future development or have been recognised as having public value.*
- 3) Works to protected trees will only be granted consent where these:*
 - a) Would not adversely affect the appearance of the tree and the contribution it makes to the visual amenity of the locality; or*
 - b) Would improve the health and/or amenity value of the tree.*
- 4) The felling of protected trees will only be allowed where:*
 - a) The tree is demonstrated to the Council's satisfaction to be in poor health and/or to have lost its intrinsic visual amenity value; or*
 - b) The tree is causing demonstrable harm/damage to the structural integrity of a building or structure, (evidenced by a structural and arboricultural report prepared by appropriately qualified consultant(s)), and the harm cannot be remedied by other reasonable means.*
- 5) Where the felling of protected trees is allowed, replacement planting will normally be required.*

Trees and hedgerows within development sites

6) Development proposals should provide for the protection and integration of other existing trees and hedgerows for their wildlife, landscape and/or amenity value. Where trees or hedgerows will be lost due to new development and this is considered acceptable on balance, the Council may require developers to replant trees of appropriate species on site where it is practicable to do so; or off site where it is not. The extent of replanting will not necessarily be a 1:1 ratio but will reflect the age, number and size of trees or length of hedgerows to be lost and the environment and likely survival rate for replacement trees. Where development proposals would affect or be affected by trees or established woodland on or adjacent to the development site, the Council may expect planning applications to be accompanied by:

a) An arboricultural survey prepared by a suitably qualified and experienced person in accordance with BS: 5837 (2012) 'Trees in Relation to Design, Demolition and Construction' and any subsequent revisions.

b) A landscaping scheme which clearly shows adequate spacing between trees and buildings, taking into account the existing and future size of trees, both above and below ground.

- 2.25 In addition to policies NE3 and NE4, policy HS1/2 - Hollins Cross Farm is a site specific policy, however there is no arboricultural-related text within this policy.

Tree Preservation Orders

- 2.26 A check with the local authority was undertaken on 17th August 2021. The Development Control Team at Burnley Borough Council confirmed that no trees within or immediately adjacent to the site are protected by Tree Preservation Order.

Conservation Areas

- 2.27 A check with the local authority was undertaken on 17th August 2021. The online mapping system confirmed that no trees within or immediately adjacent to the site are within a Conservation Area.

Ancient Woodland

- 2.28 Ancient Woodland is defined in England as any area that has been wooded continuously since at least 1600 AD; it is regarded as 'irreplaceable'¹¹. 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.

- 2.29 There is no ancient woodland within or adjacent to the site.

¹¹ NPPF Annex 2: Glossary (p.67)

Veteran Trees

- 2.30 NPPF defines veteran trees are those which, because of age, size and condition, are of exceptional biodiversity, cultural or heritage value¹². All ancient trees are veteran trees. Not all veteran trees are ancient, though they tend to be relatively old for the species. Ancient and veteran trees are regarded as 'irreplaceable'.
- 2.31 There is no comprehensive national register of veteran trees. The Woodland Trust maintains an inventory of significant trees which includes some ancient and veteran individuals¹³. At the time of writing it contained no records of relevance to the site.
- 2.32 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.
- 2.33 Not all mature trees or those of high habitat interest are veterans. Trees with individual or simple assemblages of features typically associated with veteran trees were also noted¹⁴. Such trees may become veterans but should not be treated as such for the purposes of impact assessment.

Community Forests

- 2.34 Online mapping¹⁵ confirmed that the site is not within a Community Forest.

Habitats of Principal Importance

- 2.35 A list¹⁶ of habitats which are of principal importance for the purpose of conserving biodiversity is maintained by the Secretary of State¹⁷. 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 Inventory¹⁸. Observations were also made to corroborate the mapping during the site survey.

Deciduous Woodland

- 2.36 Six distinct types of woodland¹⁹ are amalgamated in the Inventory under the habitat type 'Deciduous Woodland'.
- 2.37 The Inventory has no records of Deciduous Woodland at the site.

*Wood Pasture and Parkland*²⁰

- 2.38 The Inventory has no records of Wood Pasture and Parkland at the site.

¹² NPPF Annex 2: Glossary (p. 64)

¹³ <https://ati.woodlandtrust.org.uk/>

¹⁴ See Appendix A

¹⁵ <https://magic.defra.gov.uk/>

¹⁶ <http://jncc.defra.gov.uk/page-5706>

¹⁷ Natural Environment and Rural Communities Act 2006, 41 (1)

¹⁸ <https://magic.defra.gov.uk/MagicMap.aspx>

¹⁹ Upland Oakwood; Lowland Beech and Yew Woodland; Upland Mixed Ashwoods; Wet Woodland; Lowland Mixed Deciduous Woodland; Upland Birchwoods

²⁰ http://jncc.defra.gov.uk/docs/UKBAP_BAPHabitats-65-WoodPastureParkland2011.doc

Traditional Orchards²¹

- 2.39 The Inventory has no records of Traditional Orchards at the site.

Hedgerow²²

- 2.40 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.
- 2.41 The survey identified 4 hedgerows²³. Of these, none meet the description of the Habitat of Principal Importance.

Protected Species

- 2.42 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.
- 2.43 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

- 2.44 Intentional harm to a wild bird, egg, or a nest that is in use or being built is an offence²⁴. 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 offence²⁵.
- 2.45 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.
- 2.46 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.

²¹ http://jncc.defra.gov.uk/Docs/UKBAP_BAPHabitats-56-TraditionalOrchards.doc

²² http://jncc.defra.gov.uk/Docs/UKBAP_BAPHabitats-17-Hedgerows.doc

²³ See Appendix A

²⁴ Wildlife and Countryside Act 1981, 1 (1)

²⁵ Wildlife and Countryside Act 1981, 1 (5)

Bats

- 2.47 It is an offence to damage, destroy or obstruct access to any structure or place which is used for shelter or protection²⁶, or breeding or resting²⁷ by a bat. Mature trees often contain cavities, splits and ivy, which may be attractive to bats.
- 2.48 Features that may be suitable to support roosting bats that were found incidentally during the ground based tree survey were noted, although these do not constitute a bat assessment which must be completed by a suitably qualified ecologist.
- 2.49 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.

²⁶ Wildlife and Countryside Act 1981, 9 (4)

²⁷ The Conservation of Habitats and Species Regulations 2017, 43 (1)

3.0 Effects

- 3.1 In simple terms, the effects on arboriculture comprises 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.

Proposed development

- 3.2 The proposed development comprises the construction of 200 residential dwellings with associated access road, footways and drainage.
- 3.3 The proposed layout is shown on Drawing 2 and Drawing 3 and is based on the Detail Layout (drawing reference: WD20-90-DL01) provided by Woodcroft Design.
- 3.4 An external works plan showing the detail and arrangement of drainage, levels, retaining structures and utilities was not available to inform the production of this assessment.

Tree Removal

- 3.5 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.
- 3.6 In total, 5 individual trees and 8 tree groups (equating to approximately 0.1197ha grouped canopy cover) would be removed in full or part.

Table 3 Reference number and location of features that would be removed

	Trees	Groups	Woodland	Hedgerow
Remove (on-site)	T3, T4, T16, T18	G4, G7, G10, G11, (G17)	-	-
Remove (off-site)	T5	(G14)	-	-

(Features in brackets are those of which a part would be removed and part retained)

- 3.7 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 would constitute a material amendment and may therefore require an application to vary the consent.
- 3.8 The removal of trees that are not wholly within the application boundary will require the permission of the landowner. It may be necessary to demonstrate the ability to undertake such works and how they would be secured prior to determination. Of the trees proposed for removal within this development, 2 are located within third party land; T5 and 1 tree within G14.

- 3.9 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. It uses canopy area to describe effects on Trees, Groups and Woodland. The reported areas may be higher than the absolute area of tree cover on the site due to overlap between adjacent features.

Table 4 Quantity and percentage of trees to be removed

Feature	Number of features affected				
	Category A	Category B	Category C	Category U	Hedges
Trees	0	1	3	1	0
Groups	0	0	6	2	
Woodland	0	0	0	0	
Total loss	0ha	0.0020ha	0.1125ha	0.0109ha	0m
Proportion of existing	0%	0.96%	77.27%	100%	0%

- 3.10 Tree removal is predominantly associated with the construction of proposed residential dwellings, with a smaller amount relating to access road and attenuation basin construction, and to accommodate proposed garden space.
- 3.11 The most significant arboricultural loss would be the removal of 1 moderate quality (Category B) tree (T5) and a large proportion of a low quality (Category C) group (G17). T5 is a third party goat willow located within an adjacent garden, the removal of which is associated with the proposed attenuation basin construction. G17 is situated on the western site boundary, providing significant screening and habitat between the adjacent golf course and the site; the partial removal of which will lead to a large reduction of this function.
- 3.12 The majority of removals are located internally within the site and are either low quality linear groups of predominantly hawthorn or Category U trees or groups of dead and moribund trees. The removal of these groups would cause a small loss in habitat, but the groups are of little landscape or arboricultural value.
- 3.13 Both T5 and G14 (Category C group adjacent to north-western corner) are situated on third party land outside of the application boundary. In order to remove them to accommodate the proposed development, as shown on Drawing 2, it would be necessary to be able to either demonstrate control over the trees or to gain permission from the landowners to complete the works.

- 3.14 Several trees would require pruning in order to accommodate the proposals. Trees within groups G2 and the southern compartment of G17 will require crown reducing by between 1m (G2) and 2m (G17). Trees T12 to T15 will require crown lifting to 4m in order to provide adequate clearance over the proposed gardens and fences. The proposed crown reductions are relatively minor and crown lifting would be in accordance with normal maintenance. All pruning works would be tolerable and would not affect the long term health, quality, longevity and condition of the trees.
- 3.15 1 tree (T10) and 1 group (G2) will require root pruning in order to accommodate the proposed attenuation basin to the north of the site. The root pruning in both instances would equate to an area of c. 8.4m² of RPA loss but would be tolerable due to the age and species of the trees. The methodology for root pruning should be detailed within an Arboricultural Method Statement.

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 described.
- 4.2 The table below provides an overview of effects on the receptors described in the preceding sections. Within it, Column (1) describes the outcome for each receptor without mitigation; Column (2) reflects whether any mitigation would be secured by the current application; Column (3) represents whether predicted effects are (or could be rendered) neutral or positive; and Column (4) defines the outcome in simple terms.

Table 5 Summary of effects and mitigation

Receptor	(1) Adverse effect*	(2) Mitigation proposed	(3) Mitigation possible	(4) Residual effect
Tree cover	Yes	Yes	Yes	Positive
Tree condition ²⁸	Yes	Yes	Yes	Pending
Ancient Woodland	No	N/A	N/A	Neutral
Veteran Trees	No	N/A	N/A	Neutral
Deciduous Woodland	No	N/A	N/A	Neutral
Wood Pasture and Parkland	No	N/A	N/A	Neutral
Traditional Orchard	No	N/A	N/A	Neutral
Hedgerow	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**²⁹ residual effects are those that should have no weight in decision making.

²⁸ In this context, whether there would be a risk of harm to existing trees during development (without protection)

²⁹ Including negligible and non-material effects

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:

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.

Planting

4.9 New planting is proposed and detailed on the Soft Landscape Proposals (drawing ref: 19398). This details 237 trees, predominantly with a small to medium ultimate size, and including a variety of ornamental and native species including *Acer campestre*, *Carpinus betulus*, *Prunus* 'Kanzan' and *Tilia cordata* 'Greenspire'. There is also approximately 439m native species hedgerow and 1481m ornamental species hedgerow planting proposed.

4.10 The proposed planting comprises more trees than would be removed. There would therefore be a net gain in tree cover by the time the new trees are mature. There would be a substantial net gain in hedgerow across the site.

4.11 The planting scheme includes a greater range of species than would be removed, although the function of the trees would be fundamentally different to those removed, due to the wider distribution but reduced connectivity; changes to the species mix and size of the proposed trees, and associated reduction in the arboreal biodiversity in this respect.

4.12 The average mature size of tree species on the site would be increased by the proposed development and planting scheme.

Recommended measures

4.13 The following measures should be secured by planning condition or other agreement:

Arboricultural Method Statement

4.14 Tree Protection Measures and construction methods to prevent harm to retained trees in accordance with BS5837:2012 should be detailed within an Arboricultural Method Statement prior to commencement of development.

4.15 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.

Level change, utilities and drainage

- 4.16 There should be no level change, or installation of buried utilities or drainage within any Root Protection Area³⁰ unless it can be demonstrated within the AMS that this will be done without deterioration in tree condition.

³⁰ As per Drawing 2

APPENDIX A: Arboricultural Survey Data



Surveyor Heather Eilbeck
 Survey Date 17.08.2021
 Site Hollins Cross, Burnley
 Drawing Ref D9020.001

APPENDIX A: Arboricultural Survey Data Sheets

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
Trees																	
T1	Crab apple	4.0	2.0	230	1	2.0	2.0	2.0	2.0	2.0	W	Middle Age	Good	Street tree within grass verge between road and pavement. Trifurcate at c. 2m. Stem leans to south-east. Previous limb tear out in lower southern canopy. Healthy.		C ,1	Long
T2	Lawson cypress	4.0	2.0	255	2	2.0	2.0	2.0	2.0	2.0	N	Middle Age	Good	Basally bifurcate tree within garden close to conservatory. Tight stem union. Rounded canopy form. Inspection restricted by access.		C ,1	Long
T3	Dead tree	4.0	1.5	423	7	2.0	2.0	2.5	2.5	1.5	SW	Middle Age	Dead	Basally multi-stemmed dead tree in field.		U	Very Short
T4	Common hawthorn	3.0	0.0	120	1	1.0	1.5	1.5	1.0	0.5	S	Middle Age	Good	Tree at edge of field adjacent to boundary. Healthy.		C ,1	Long
T5	Goat willow	5.0	2.0	311	2	3.0	2.5	2.5	2.5	2.0	S	Middle Age	Good	Tree in garden boundary hedge close to field edge. Basally bifurcate with tight union and multi-stemmed at 2m. Rounded canopy. No major defects noted.		B ,1	Long
T6	Horse chestnut	4.0	1.5	200	1	2.0	2.0	2.0	2.0	1.5	E	Middle Age	Good	Tree at end of garden adjacent to field. Rounded canopy. Inspection restricted by access.		C ,1	Long
T7	Common ash	6.0	1.5	141	2	1.5	1.5	1.5	1.5	1.5	W	Middle Age	Fair	Tree within garden close to field edge. Bifurcate at c. 1m. Ash dieback symptoms evident. Inspection restricted by access.		C ,1	Very Short
T8	Lawson cypress	5.0	1.5	163	2	1.5	1.5	1.5	1.5	1.5	W	Middle Age	Good	Tree within garden close to field edge. Appears healthy. 2 stems forming one canopy and of same rooting stock. Inspection restricted by access.		C ,1	Medium
T9	Lawson cypress	6.0	2.0	350	1	2.5	2.5	2.5	2.5	2.0	E	Middle Age	Good	Tree in garden in close proximity to house. Well rounded canopy and good form. Inspection restricted by access.		B ,1	Long
T10	Goat willow	6.0	2.0	502	3	3.0	4.0	4.0	2.5	3.0	SE	Middle Age	Fair	Tree within garden adjacent to field. Trifurcate at c. 1.5m. Previously pruned limb evident in northern lower canopy leaving piece of major deadwood. Some canopy thinning and dieback evident. Tight stem unions with some included and fusing. Inspection restricted by access.		B ,1, 2	Medium
T11	Whitebeam	7.0	1.5	430	1	5.0	5.0	4.5	4.0	2.5	N	Middle Age	Good	Tree within grass verge adjacent to road and farm access track. Bifurcate at c. 2m with tight union. Stem leans to east. No major defects noted.		B ,1, 2	Long
T12	Norway maple	10.0	0.5	540	1	6.5	6.5	6.5	5.5	2.5	S	Middle Age	Good	Tree within grass verge close to field fence. Bifurcate at c. 2.5m with very tight union. Stem leans to south-east slightly. No major defects noted.		A ,1, 2	Long
T13	Norway maple	10.0	0.5	320	1	3.0	6.0	4.0	2.0	2.0	S	Middle Age	Fair	Tree within grass verge close to field fence. Bifurcate at c. 2m. Stem leans significantly to east. Canopy biased to east due to lean. Pruned limbs evident. Appears healthy, albeit asymmetrical.		B ,1, 2	Medium
T14	Horse chestnut	11.0	0.5	600	1	6.0	5.0	4.5	4.5	2.0	S	Middle Age	Good	Tree adjacent to road on boundary. Multi-stemmed at c. 2m. Canopy slightly suppressed to south due to adjacent sycamore. Horse chestnut leaf miner present. No major visible defects noted.		A ,1, 2	Long
T15	Sycamore	10.0	1.0	622	3	5.0	4.5	5.0	4.5	2.5	E	Middle Age	Good	Tree adjacent to road on boundary. Trifurcate between ground and c. 1.5m. Base slightly obscured by undergrowth. Rounded canopy form. No major visible defects noted.		A ,1, 2	Long
T16	Common hawthorn	3.0	0.0	98	6	1.0	1.0	1.0	1.0	0.0	N	Middle Age	Good	Small self-set tree close to telegraph pole and boundary fence.		C ,1	Long
T17	Pedunculate oak	3.0	0.0	100	2	2.5	1.5	2.5	1.0	0.0	N	Middle Age	Fair	Tree located on adjacent golf course. Prevailing wind and exposed location has caused tree to be stunted and grow heavily towards the east and lean in this direction. Dieback in canopy.		C ,1	Short
T18	Goat willow	4.0	0.0	209	5	3.0	2.0	2.0	2.0	0.0	N	Middle Age	Good	Tree within field. Basally multi-stemmed. Canopy slightly biased to north. Healthy.		C ,1	Medium



Surveyor Heather Eilbeck
 Survey Date 17.08.2021
 Site Hollins Cross, Burnley
 Drawing Ref D9020.001

Italicised Feature Ref: Inspection of this feature was restricted
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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
Groups																	
G1	Boxelder, Copper beech	3 to 4	0.5	75 to 120	3							Young to Middle Age	Good	3 small trees in shrubs at edge of garden adjacent to pavement.		C ,2	Long
G2	Lawson cypress, European larch, Elder	3 to 7	0.0	80 to 300	8							Middle Age	Mixed	Third party group adjacent to field edge. Predominantly in good condition with exception of larch which is in fair condition due to some dieback. Some shrub species interspersed. Screening value.		B ,2	Medium
G3	Lawson cypress	3 to 4	0.0	100 to 150	3							Middle Age	Good	3 small conifer trees in garden. Inspection restricted by access.		C ,1	Long
G4	Common hawthorn, English holly	2 to 5	0.0	75 to 400	15							Middle Age	Mixed	Several sporadic trees on ditch bank in centre of field. Multi-stemmed forms. Most trees in fair condition, some in poor condition. Dieback of varying degrees evident. Occasional larger hawthorn in group.		C ,2	Medium
G5	Common hawthorn	3 to 3	1.0	120 to 140	4							Middle Age	Poor	Several moribund stems in field close to ditch.		U	Very Short
G6	Common hawthorn	2 to 3	0.0	75 to 200	3							Middle Age	Poor	2 larger hawthorns with small third hawthorn. On ditch bank. Moribund.		U	Very Short
G7	Common hawthorn	2 to 4	1.0	120 to 250	5							Middle Age	Fair	Row of hawthorns on southern ditch bank. Some dieback and occasional dead stem. Multi-stemmed forms.		C ,2	Medium
G8	Sycamore, Common alder, Common ash, Wild cherry, Pedunculate oak, Goat willow	3 to 11	0.5	75 to 500	25							Middle Age	Mixed	Linear group of roadside trees adjacent to field. Field slopes steeply down to road within group. Most trees in good condition with exception of 3 ash trees which are in fair or poor condition due to extensive ash dieback. Multi-stemmed forms, some with tight and/or included unions. Largest tree in group is goat willow in the northernmost section of group. Screening value.		B ,2	Medium
G9	Sycamore, Lawson cypress, Hazel species, Common hawthorn, Common Laburnum, Aspen, Wild cherry, Pedunculate oak, Rhododendron species, Goat willow, Elder, Rowan, Swedish whitebeam	3 to 7	0.0	100 to 360	40							Middle Age	Good	Group of third party mixed species trees around corner of garden. Adjacent to ditch with some growing on bank or within ditch. Screening and habitat value.		B ,2	Long
G10	Common hawthorn, Aspen	3 to 4	0.5	60 to 250	9							Young to Middle Age	Fair	Row of hawthorn trees with 1 small and young self-set aspen at eastern end of group. Stems lean in various directions. Some dieback of hawthorns. Cattle trampling around and between trees.		C ,2	Medium
G11	Common hawthorn, Elder	3 to 4	0.5	140 to 250	10							Middle Age	Mixed	Row of hawthorn trees adjacent to ditch. Stems lean in various directions with some collapsed stems. Some dieback of hawthorns. Cattle trampling around and between trees. Trees in fair or poor condition and occasional dead stems.		C ,2	Short
G12	Sycamore, Common beech	7 to 7	0.0	200 to 360	4							Middle Age	Good	Western edge of larger cluster of trees on adjacent third party land. Multi-stemmed forms of beech trees. No major defects noted. Screening and habitat value as part of larger group. Inspection restricted by access.		B ,1, 2	Long
G13	Lawson cypress	4 to 4	0.0	120 to 130	2							Middle Age	Good	2 trees within third party garden. Canopies merging and forming one shape. Healthy. Inspection restricted by access.		C ,1	Long
G14	Cider gum, Common ash, Apple species, Elder	3 to 4	1.0	80 to 140	5							Middle Age	Good	Several trees located adjacent to garden boundaries in various third party land parcels. No signs of dieback in ash currently. All trees appear healthy. Inspection restricted by access.		C ,1	Long
G15	Leyland cypress	4 to 4	0.0	140 to 200	20							Middle Age	Good	Third party screening group around small outbuilding. Fairly well maintained, although slightly outgrown at present.		B ,2	Long
G16	Sycamore, Downy birch, Common ash	2 to 9	0.0	60 to 350	8							Young to Middle Age	Mixed	Small cluster of trees on adjacent golf course. Predominantly middle age and in good condition with exception of 2 young ash trees, 1 of which is dead, and a middle age ash that is in fair condition due to ash dieback symptoms. Screening value. Inspection restricted by access.		B ,2	Long
G17	Common hawthorn, Common beech, English holly, Wild cherry, Currant species, Goat willow, Elder, Rowan	2 to 5	0.0	50 to 200	50							Middle Age	Good	Dense linear group of trees adjacent to golf course access road. Multi-stemmed forms. Screening and habitat value.		C ,2	Long



APPENDIX A: Arboricultural Survey Data Sheets

Surveyor Heather Eilbeck
Survey Date 17.08.2021
Site Hollins Cross, Burnley
Drawing Ref D9020.001

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
Hedges																	
H1	Common box, Dogwood species, Common hawthorn, Leyland cypress, English holly, Privet species, Blackthorn, Rhododendron species, Dog rose, Elm species, Viburnum species	2 to 3		<i>n/a</i>	<i>n/a</i>							Middle Age	Good	Mixed shrub and woody species hedge. Third party. Fairly maintained. Height undulates.		<i>n/a</i>	<i>n/a</i>
H2	Privet species	1.5 to 1.5		<i>n/a</i>	<i>n/a</i>							Middle Age	Fair	Maintained third party hedge. Heavily cut back so reduced foliage at present.		<i>n/a</i>	<i>n/a</i>
H3	Lawson cypress	2 to 2		<i>n/a</i>	<i>n/a</i>							Middle Age	Fair	Third party hedge in garden. 1 side heavily cut back exposing brown foliage.		<i>n/a</i>	<i>n/a</i>
H4	Common hawthorn, Blackthorn	2 to 2		<i>n/a</i>	<i>n/a</i>							Middle Age	Good	Slightly outgrown garden boundary hedge.		<i>n/a</i>	<i>n/a</i>

APPENDIX B: Survey Method

APPENDIX B: Survey Method

The survey of trees is conducted from ground level only. The nature of the soils on site is not assessed.

Trees are dynamic living organisms with a constantly changing structure; even trees in good condition can suffer from damage or stress. The information recorded is presented as being correct at the time of survey.

The following features of each tree, group of trees or wood may have been recorded in the Arboricultural Survey Data Sheets at Appendix 1.

Species	The common name is given. The Latin name may also be given if further clarification is required.	
Height	Top height of tree recorded in metres.	
Stem Diameter	For single-stemmed trees the measurement is taken at 1.5 metres above ground level and recorded in millimetres. For multi-stemmed trees an average all stems measured at 1.5m above ground level is used. For tree groups a range from minimum to maximum diameters is provided based on measurements taken using one of the aforementioned methods.	
No. of Stems	A count of stems arising below a height of 1.5 metres.	
Crown Spread	The N, S, E and W branch spreads are recorded in metres to provide a representative crown shape.	
Height of Lowest Branch	Crown clearance above ground level recorded in metres.	
Direction of Lowest Branch	The direction of growth of the first significant branch from the point of attachment.	
Maturity	Young	Trees that can reasonably be relocated or replaced like for like, without undue cost;
	Middle Age	Trees in the established growth stage of their life with the potential to continue increasing in size;
	Mature	Trees that have reached their ultimate size, given their location and surroundings;
Condition	Good, Fair, Poor. An overall assessment of a tree's physiological and structural state in which factors that may increase its susceptibility to the effects of development are taken into account. Veteran. Trees that are in such a condition as to significantly increase their biological, cultural or aesthetic value. This is characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species concerned.	
Comments	A brief evaluation and description of the tree with comments on form, vitality, health and any significant defects or symptoms of ill-health.	

BS 5837 Tree Quality Assessment

The tree quality assessment is based on Table 1 of BS 5837:2012 (See below). Four categories (A, B, C and U) are used to denote tree quality (A= High, B = Moderate, C = Low, U= Unsuitable for retention). Subcategories (1-3) denote the specific function value of the trees and the reasoning behind the allocation of a specific category (the subcategories may be used in combination but do not accumulate collective weight).

Root Protection Area (RPA)

The RPA is allocated to ensure that a sufficient area is left undisturbed during development. It is provided as an area (m²) and as the radius of a circle (m) typically plotted from the centre of the stem.

The RPA is calculated using a mathematical equation included in BS 5837:2012 (Section 4.6 and Table D.1) and is based on a tree's stem diameter. In some cases the RPA may need to be adapted to best reflect the likely area and position of roots required to ensure survival; this may be based on criteria such as the tree's condition, species, crown spread and any barriers to growth. Any alteration must be justifiable but is made at the Arboricultural Consultants discretion.

Recommendations

Recommendations for arboricultural works, etc. are based on the **current** land use, and take into account the tree or group attributes without bias to the proposed development.

Estimated Remaining Contribution

An estimation of the life expectancy as healthy functioning tree. This will be influenced by species and the condition of the tree at the time of survey.

Long	> 40 years
Medium	20 – 40 years
Short	less than 20 years

APPENDIX B: Survey Method

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

British Standards Institute (2012) BS5837:2012 Trees in relation to design, demolition and construction – Recommendations.
p.9

NOTES:

All young trees are assessed as quality category 'C' but this does not preclude their retention within a development.

For hedges the height, canopy spread and number of stems is recorded but they are not assigned a quality category.

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 Trees and Groups
- H1 Hedgerow
- Root Protection Area (RPA)
- Areas of Shrubs, Bramble and Small Trees (Approximate locations; trees <70mm diameter)
- Application Boundary
- # Approximate location (Feature not shown on supplied topographical survey)

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)
- Hedgerow (Not categorised)

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

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Rev	Description	Drawn	Approved	Date
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Tel 01925 844004 e-mail tep@tep.uk.com www.tep.uk.com

Project
Hollins Cross, Burnley
Arboricultural Impact Assessment

Title
Drawing 1: Tree Constraints Plan [BASELINE]

Drawing Number
D9020.001

Drawn	Checked	Approved	Scale	Date
HEE	RMG	TDP	1:2000 @ A3	26/08/2021



KEY

[This drawing must be reproduced in colour]

- T1/G1 Trees and Groups
- H1 Hedgerow
- Root Protection Area (RPA)
- Areas of Shrubs, Bramble and Small Trees (Approximate locations; trees <70mm diameter)
- Application Boundary
- # Approximate location (Feature not shown on supplied topographical survey)

Trees and hedgerow to be retained and protected

- Category A (High quality)
- Category B (Moderate quality)
- Category C (Low quality)
- Hedgerow (Not categorised)
- Retained Shrubs, Bramble and Small Trees (Approximate locations; trees <70mm diameter)

Proposed tree works

- Trees to be removed (Canopy outline denotes tree quality category)
- Trees to be crown reduced (Canopy outline denotes tree quality category)
- Trees to be crown lifted (Canopy outline denotes tree quality category)
- Shrubs, bramble and small trees to be removed

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

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Rev	Description	Drawn	Approved	Date
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THE ENVIRONMENT PARTNERSHIP

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Project
Hollins Cross, Burnley
Arboricultural Impact Assessment

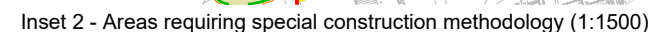
Title
Drawing 2: Tree Works Plan [EFFECTS]

Drawing Number
D9020.002

Drawn	Checked	Approved	Scale	Date
HEE	AAB	TDP	1:2000 @ A3	04/10/2021

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.
- (c) The build programme and site logistics plan should be reviewed in relation to retained trees.
- (d) Utilities and drainage information should be reviewed in relation to retained trees.
- (e) Levels information should be reviewed in relation to retained trees.
- (f) 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.
- (g) 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.



[This drawing must be reproduced in colour]

-  T1/G1 Retained Trees and Groups
 -  H1 Retained hedgerow
 -  Root Protection Area (RPA)
 -  Areas of Shrubs, Bramble and Small Trees
(Approximate locations; trees <70mm diameter)
 -  Application Boundary
 -  Approximate location
(Feature not shown on supplied topographical survey)

Special Construction Methodology Areas

- Root Pruning
- Boundary Treatments
- Soft Landscaping

NOTE: All areas of special construction methodology will require detailing within an Arboricultural Method Statement.



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Rev	Description	Drawn	Approved	Date
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Project
Hollins Cross, Burnley
Arboricultural Impact Assessment

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

Drawing Number
D9020.003

Drawn HEE	Checked AAB	Approved TDP	Scale See Insets @ A3	Date 04/10/2021
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