Lagan Homes Ltd

Land West of Ratby, Leicestershire

Arboricultural Assessment

July 2024

FPCR Environment and Design Ltd
Registered Office: Lockington Hall, Lockington, Derby DE74 2RH
Company No. 07128076. [T] 01509 672772 [F] 01509 674565 [E] mail@fpcr.co.uk [W] www.fpcr.co.uk

Rev	Issue Status	Prepared / Date	Approved/Date
-	Draft	RG / 22.05.24	HCK / 22.05.24
	Final	RG / 03.07.24	HCK / 03.07.24

CONTENTS

1.0 INTRODUCTION 2

2.0 PLANNING POLICY 3

3.0 SURVEY METHODOLOGY 3

4.0 RESULTS 7

5.0 ARBORICULTURAL IMPACT ASSESSMENT 11

6.0 NEW TREE AND HEDGEROW PLANTING 14

7.0 TREE PROTECTION MEASURES 16

8.0 TREE MANAGEMENT 17

TABLES

Table 1: Summary of Trees by Retention Category

Table 2: Tree Preservation Order / Conservation Area Details

Table 3: Summary of Impact on Tree Stock

Table 4: Impact to TPO Trees

FIGURES

Figure 1: The chart of girth in relation to age and development classification of trees

PLANS

Tree Survey Plan (10783-T-01)

Tree Retention Plan (10783-T-02)

Tree Retention Plan – Access (10783-T-03)

APPENDICES

Appendix A: Tree Schedule

Appendix B: Protective Fencing Specifications

Appendix C: Copy of Tree Preservation Order / Conservation Area Map

1.0 INTRODUCTION

1.1 This report has been prepared by FPCR Environment and Design Limited on behalf of Lagan Homes Limited to present the findings of an Arboricultural Assessment and survey of trees located at Land West of Ratby, Leicestershire (hereafter referred to as the site), OS Grid Ref SK 507 061.

Site Description

1.2 The site comprises agricultural fields located on the north-western side of Ratby, Leicestershire and south of Markfield Road. The site, split by Burroughs Road leading to Holywell Farm. An area currently in development forms the northeastern boundary. To the east is the existing urban edge of Ratby and to the south are further open agricultural fields. Directly to the west of the site are areas of woodland, locally known as Pear Tree Wood, managed by the Woodland Trust.

1.3 Given the current land use of the site, tree cover associated with the site was found around field boundaries, growing within well-established native species hedgerows and in the form of blocks of woodland's situated to the west, albeit most were situated outside of the site boundary. Overall, individual trees were predominantly common ash Fraxinus excelsior with a limited number of other species. Species present within the hedgerows consisted of a range of native species. More details are provided in the Results Section.

Scope of Assessment

1.4 A tree survey and assessment of existing trees was carried out by FPCR Environment and Design on 11th October 2023 in accordance with guidance contained within British Standard 5837:2012 'Trees in Relation to Design, Demolition and Construction - Recommendations' (hereafter referred to as BS5837).

1.5 This report has been produced to accompany an Outline planning application (with all matters reserved apart from access) for a phased, mixed-use development comprising about 470 dwellings (Use Class C3) or, in the alternative, about 450 dwellings and care home (Use Class C2). Provision of land for community hub (Use Class F2); provision of land for 1FE primary school (Use Class F1); and associated operations and infrastructure including but not limited to site re-profiling works, sustainable urban drainage system, public open space, landscaping, habitat creation, internal roads/routes, and upgrades to the public highway.

1.6 The purpose of this report is therefore to firstly, present the results of this assessment of the existing trees' arboricultural value, based on their current condition and quality and to secondly, provide an assessment of impact arising from the proposed development of the site.

2.0 PLANNING POLICY

National Planning Policy Framework December 2023

2.1 National Planning Policy is defined by the National Planning Policy Framework (NPPF). This sets out the Government's most current and up to date planning policies for England and how these should be applied. The current NPPF is dated December 2023.

2.2 In relation to arboriculture, the NPPF states that:

- *136 'Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined (footnote 53), that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users'. (footnote 53: unless, in specific cases, there are clear, justifiable and compelling reasons why this would be inappropriate)*
- *186 (c) 'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons (footnote 67) and a suitable compensation strategy exists'.*

  and provides specific guidance that:

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

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

3.0 SURVEY METHODOLOGY

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

quality and benefits within the context of the proposed development in a transparent, understandable, and systematic way.

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

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

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

BS5837 Categories

3.4 Trees, groups, hedgerows, and woodland have been divided into one of four categories based on Table 1 of BS5837, *'Cascade chart for tree quality assessment'*. For a tree to qualify under any given category it should fall within the scope of that category's definition (see below).

3.5 Category U trees are those which would be lost in the short term for reasons connected with their physiology or structural condition. They are, for this reason not considered in the planning process on arboricultural grounds.

3.6 Categories A, B and C are applied to trees that should be of material consideration in the development process. Each category also having one of three further sub-categories (i, ii, iii) which are intended to reflect arboricultural, landscape and cultural or conservation values accordingly.

3.7 **Category (U) – (Red):** Trees which are unsuitable for retention and are in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years. Trees within this category are:

- Trees that have a serious irremediable structural defect such that their early loss is expected due to collapse and includes trees that will become unviable after removal of other category U trees.
- Trees that are dead or are showing signs of significant, immediate or irreversible overall decline.

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

- Trees that are infected with pathogens of significance to the health and/ or safety of other nearby trees or are very low quality trees suppressing adjacent trees of better quality.
- Certain category U trees can have existing or potential conservation value which may make it desirable to preserve.

3.8 **Category (A) – (Green):** Trees that are considered for retention and are of high quality with an estimated remaining life expectancy of at least 40 years with potential to make a lasting contribution. Such trees may comprise:

- Sub category (i) trees that are particularly good examples of their species, especially if rare or unusual, or are essential components of groups such as formal or semi-formal arboricultural features for example the dominant and/or principal trees within an avenue.
- Sub category (ii) trees, groups or woodlands of particular visual importance as arboricultural and / or landscape features.
- Sub category (iii) trees, groups or woodlands of significant conservation, historical, commemorative or other value for example veteran or wood pasture.

3.9 **Category (B) – (Blue):** Trees that are considered for retention and are of moderate quality with an estimated remaining life expectancy of at least 20 years with potential to make a significant contribution. Such trees may comprise:

- Sub category (i) trees that might be included in category A but are downgraded because of impaired condition for example the presence of significant though remediable defects, including unsympathetic past management and storm damage.
- Sub category (ii) trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals or trees occurring as collectives but situated so as to make little visual contribution to the wider locality.
- Sub category (iii) trees with material conservation or other cultural value.

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

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

Ancient and Veteran Trees

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

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

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

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

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

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

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

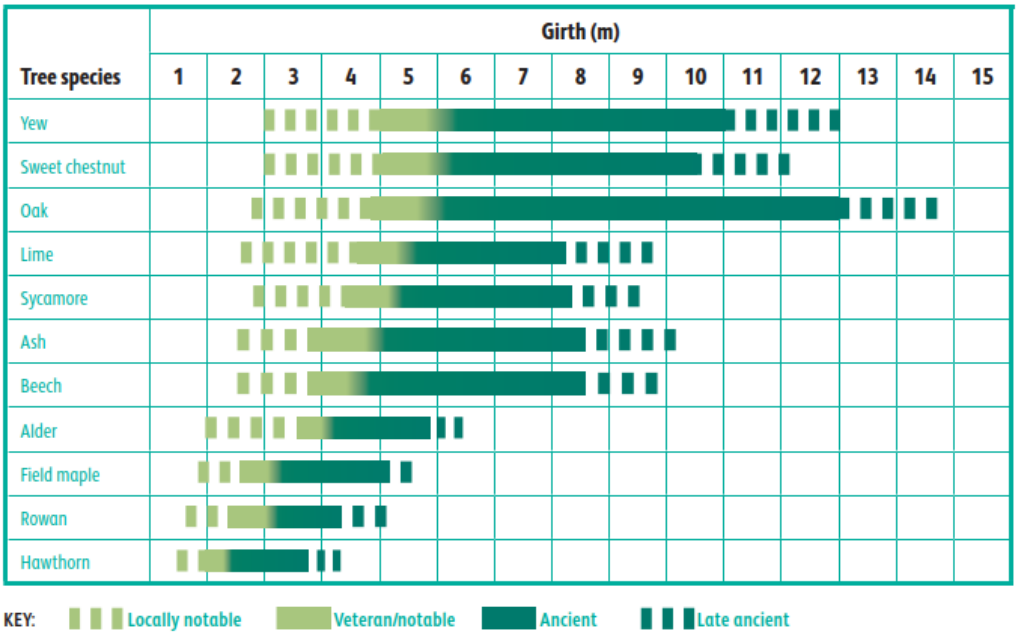

Figure 1: The chart of girth in relation to age and development classification of trees, as shown in Lonsdale (2013)[4].

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

'A tree which, because of its age, size, and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be

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

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

ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage."[5]

Considerations and Limitations of the Tree Survey

3.16 The survey was completed from ground level only and from within the boundary of the site. Aerial tree inspections or an assessment of the internal condition of the stem/s or branches were not undertaken at this stage as this level of survey is beyond the scope of the initial assessment.

3.17 The statements made in this report regarding the assessed applies to the date of survey and cannot be assumed to remain unchanged. It will be necessary to review all comments and observations made within this report, in accordance with sound arboricultural practice, within two years of the date of survey (unless explicitly stated elsewhere within this report). Further review may also be necessary where site conditions change or works to trees are carried out which have not been specified in detail within this report.

3.18 Hedgerows are identified as a Habitat of Principal Importance (HPI) as listed within Section 41 of the Natural Environment and Rural Communities (NERC) Act 2006. The tree survey conducted, in accordance with BS5837, does not assess hedgerows against the Hedgerow Regulations 1997 or specifically from an ecological perspective, and is outside the scope of this assessment.

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

4.0 RESULTS

4.1 A total of 48 individual trees, 24 groups of trees, 5 woodlands and 17 hedgerows were surveyed as part of the Arboricultural Assessment. Trees were surveyed as individual trees, groups, hedgerows and woodland as per the survey methodology.

4.2 Appendix A presents details of all individual trees, groups, hedgerows and woodlands recorded during the assessment including heights, diameters at 1.5m from ground level, crown spread (given as a radial measurement from the stem), age class, comments as to the overall condition at the time of inspection, BS5837 category of quality and suitability for retention and the root protection area (RPA), calculated in accordance with Annex C, D and Section 4.6 of BS5837:2012.

4.3 General observations particularly of structural and physiological condition for example the presence of any decay and physical defect and preliminary management recommendations have also been recorded where appropriate.

4.4 The individual positions of trees, groups, hedgerows and woodlands have been shown on the Tree Survey Plan. The positions of trees are based on a topographical / land survey, as far as possible, supplied by the client. Where topographical information has not identified the position of trees these have been plotted using a global positioning system and aerial photography to provide approximate locations. The crown spread, root protection area and shade pattern (where appropriate) are also indicated on this plan.

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

Results Summary

4.5 The majority of trees were considered to be of moderate (Category B) and low (Category C) quality. Trees of high (Category A) and unsuitable quality (Category U) were infrequently found and made up a small proportion of the tree stock.

4.6 Trees ranged in age from semi-mature to mature and for the most part they were regarded as having fair overall structural and physiological condition, however a number were of poor overall condition.

4.7 The most abundant species recorded during the assessment was ash *Fraxinus excelsior*. Other species noted included, English oak *Quercus robur*, blackthorn *Prunus spinosa*, hawthorn *Crataegus monogyna,* elder *Sambucus nigra*, hazel *Corylus avellana* and field maple *Acer campestre*.

4.8 Table 1 below summarises the trees assessed and several of the trees have been discussed in more detail following the table, owing to their physical condition or arboricultural significance.

Table 1: Summary of Trees by Retention Category

	Individual Trees	Total	Groups of Trees	Total
Category U - Unsuitable	T9, T46	2		0
Category A (High Quality / Value)	T12, T19, T25	3	G1, G2, W2, W3, W5	5
Category B (Moderate Quality / Value	T2, T3, T4, T5, T7, T11, T14, T16, T18, T20, T21, T22, T23, T24, T30, T31, T32, T33, T34	19	G5, G6, G8, G9, G11, G14, G19, H2, H3, H4, H6, H7, H8, H9, H10, H11, H13, W1, W4	19
Category C (Low Quality / Value)	T1, T6, T8, T10, T13, T15, T17, T26, T27, T28, T29, T35, T36, T37, T38, T39, T40, T41, T42, T43, T44, T45, T47, T48	24	G3, G4, G7, G10, G12, G13, G15, G16, G17, G18, G20, G21, G22, G23, G24, H1, H5, H12, H14, H15, H16, H17	22

Individual Trees

4.9 Three individual category A trees were recorded as part of the survey, all of which were mature English oak *Quercus robur*. Attributes typical of mature oak were observed, such as deadwood, branch stubs and branch socket cavities.

4.10 The majority of individual specimens across the site were common ash *Fraxinus excelsior*. These were moderate and low quality specimens, depending upon their condition. Most of the ash were showing signs of ash dieback *Hymenoscyphus fraxineus*, some of which were considerably worse than others and thus graded as retention category C. The viability of retaining some of

these individual specimens will depend on the location within the proposed development and a appropriate management strategy should be implemented across the site.

4.11 Four specimens surveyed had sizable stems diameters of 1100mm or over, with T5 being 1350mm and T18 1500mm. These were mature ash specimens, all regarded as retention category B. Typical features of ash of this maturity were observed, such as major deadwood, storm damage and branch socket cavities. Such features may have potential for roosting bats and should be checked by a suitably qualified, licensed bat ecologist / arboriculturist prior to any tree work being carried out. Although these specimens possessed large stem diameters, following assessment they did not support sufficient other features pertaining to veteran trees to qualify. As such, none of the above-listed ash specimens were deemed to be of veteran status.

4.12 Two category U specimens were recorded, T9 and T46 both being dead ash specimens and unsuitable for retention.

Groups of trees

4.13 There were two groups regarded as being of high arboricultural quality, G1 and G2, seven category B groups and fifteen regarded as being of low arboricultural quality and value.

4.14 G1 and G2, both regarded as high value retention category A contained mature native species. These were both located to the east of the site, with a section of G1 within the Ratby Conservation Area.

4.15 A number of groups were regarded as moderate arboricultural quality, category B, notably G5, G14 and G19. G5 forming the southern boundary of the site positioned along a watercourse, species included, ash, blackthorn *Prunus spinosa*, elder *Sambucus nigra*, hawthorn *Crataegus monogyna* and alder *Alnus glutinosa*. They were typical examples of the species and exhibited conditions commonly found in trees situated within this growing environment.

4.16 G14 and G19 formed boundaries to a smaller field parcel to the north of the site. G14 were early mature specimens planted along the boundary fence line. G19 was a group forming the boundary to the adjacent site currently in development. Likely formed from an outgrown hedgerow it now provided a screen between land parcels.

Woodland

4.17 Five woodlands were recorded during the assessment. Three of which, W2, W3 and W5 were regarded as high value retention category A.

4.18 W2 and W5 contained predominantly coppiced specimens which had been managed and cut on a rotational system. Hazel *Corylus avellana* was found to be most present in W2 while W5 contained osier *Salix viminalis*. Larger trees were found around the boundaries of the two woodlands.

4.19 The majority of W3 was located to the north of the site boundary, with only a strip of trees along a watercourse within the site. The woodland is managed by the woodland trust and named Pear Tree Wood. It contained a range of native broadleaved species of a semi mature to early mature

age. Due to the planting density, the majority of the trees had etiolated form although very few defects were noted.

4.20 W4, situated to the west of the application boundary, consisted of predominantly semi mature ash trees with English oak planted along the boundary. Many trees within the plantation were showing signs of ash dieback.

4.21 W1 situated offsite to the southwest contained mixed native species with ash dieback observed within the woodland. This became more prevalent towards the northern end by virtue of the higher composition of ash specimens. Four larger ash specimens were recorded along the boundary, T13 – T16. These were mature trees with attributes typical of ash of this age, deadwood, broken branches, and potential roost features were observed. These specimens were exhibiting signs of early-stage ash dieback.

Hedgerows

4.22 Seventeen hedgerows were recorded, all of which were comprised of broad range of native species including blackthorn, hawthorn, ash, hazel, holly, elm *Ulmus procera*, elder *Sambucus nigra*, English oak. The hedgerows had almost all been regularly managed through mechanical cutting to create strong, consolidated forms.

4.23 Ten of the hedgerows were more established and were regarded as holding higher arboricultural quality and value thus assessed as retention Category B from an arboricultural perspective. The remaining seven hedgerows were regarded as being of low arboricultural quality and value, retention category C.

Ancient and Veteran Trees

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

Statutory Considerations

4.25 Local authorities have a Duty under the Town and Country Planning Act to create Tree Preservation Orders (TPO) to protect and preserve specific trees and woodlands that bring significant amenity benefit to a particular site or location.

4.26 Under a TPO it is a criminal offence to cut down, top, lop, uproot or wilfully destroy a tree protected by that Order, or to cause or permit such actions, if carried out without the prior written consent of the acting LPA.

4.27 No direct consultation with the Local Planning Authority has taken place, however, it is understood having used the online search facility on the website for the Local Planning Authority, Hinkley and Bosworth Borough Council that there are Tree Preservation Orders and Conservation Areas that would apply to trees present on, or in close proximity to the assessment site and therefore statutory constraints would apply to the development in respect of trees. Before any tree works are undertaken confirmation of the online information should be sought from the Local Authority.

4.28 A copy of the TPO and Conservation Area Map has been included within the report as Appendix C.

4.29 Local authorities have a Duty under the Planning (Listed Buildings and Conservation Areas) Act 1990 to designate Conservation Areas, to protect places of special interest where it is considered especially important to preserve the character and appearance of the area.

4.30 Within a Conservation Area extra planning controls are in place to help the Council manage change in conservation areas so that the special interest can be preserved. You must give the Council 6 weeks' notice of any proposed felling or works to trees with a diameter of over 75mm at 1500mm height, or with a diameter of over 100mm if within a group of trees that needs thinning. This gives the Council 6 weeks to consider whether to serve a Tree Preservation Order (TPO).

4.31 Should the proposed works form part of a wider planning application there would be no need to ask for separate Conservation Area consent for works to trees. But prior to any tree surgery and / or the removal of trees not detailed within this report it will be necessary to apply to the relevant local planning authority to gain consent for the works.

4.32 Information provided on Tree Preservation Orders and Conservation Areas is accurate to the date of this assessment and cannot be assumed to remain unchanged. The last check was carried out on the 22nd May 2024.

4.33 Table 2 below details which trees are included in the Hinkley and Bosworth Borough Council Tree Preservation Order and Conservation Area designation, (TPO), 0801/18/04 / Ratby Conservation Area.

Table 2: Tree Preservation Order / Conservation Area details

Tree No. taken from FPCR	TPO/Conservation Area reference no.
G1, G9, G10	Ratby Conservation Area
G1	(TPO), 0801/18/04 – T1, T2, T3
G24	(TPO), 0801/18/04 – T4 (This tree was not identified)

5.0 ARBORICULTURAL IMPACT ASSESSMENT

5.1 The following paragraphs present a summary of the tree survey and discussion of particular trees and groups recorded in the context of any proposed development in the form of an Arboricultural Impact Assessment in accordance with section 5.4 of BS5837. Any final tree retentions will need to be reconciled with the advice contained within this report.

5.2 The AIA has been based upon the Capacity Masterplan and seeks to outline the relationship between the proposals and the existing trees and hedgerows. The design of the layout has been constraint led and informed by a tree survey at an early stage in the design process. The drawing shows the proposals for Outline planning application (with all matters reserved apart from access) for a phased, mixed-use development comprising about 470 dwellings (Use Class C3) or, in the alternative, about 450 dwellings and care home (Use Class C2). Provision of land for community hub (Use Class F2); provision of land for 1FE primary school (Use Class F1); and associated operations and infrastructure including but not limited to site re-profiling works,

sustainable urban drainage system, public open space, landscaping, habitat creation, internal roads/routes, and upgrades to the public highway.

5.3 An overlay of the layout has been incorporated in the Tree Retention Plan to assist in identifying the relationship and any potential conflicts between the proposals and the existing trees and hedgerows. The plan also identifies which trees would be required to be removed or retained as part of the proposed development.

5.4 A Detailed Access Arrangement Plan has also been provided to demonstrate the location of the primary access position in relation to the surrounding tree cover allowing the identification of any potential conflicts through implementation of the site access.

5.5 Table 3 below summarises the impact on tree stock and these impacts have been discussed in more detail following the table.

Table 3: Summary of Impact on Tree Stock

	Trees to be Removed	Reason/s for removal
Category U - Unsuitable	T46	Removed for access onto Desford lane
Category A (High Quality / Value)		
Category B (Moderate Quality / Value	H6, H7, H8, H9, H16, H17	Openings in hedgerows to facilitate internal road layout.
Category C (Low Quality / Value)	T43, T44, T45, T47, G22, G23	Removed for access onto Desford lane, G22 and G23 part removed or cutting back of vegetation.
	H5, H12, T39	Removed to facilitate development parcels including Primary School

5.6 The design of the layout has been constraint led and this has resulted in the majority of trees being retained and incorporated into the proposed development. To facilitate the development a small percentage of low quality trees will require removal.

5.7 The majority of tree removals required are to construct the southern access off Desford Lane. The proposed alterations to the road junction would require the removal of four category C trees and cutting back of vegetation within groups G22 and G23.

5.8 Tree removals to facilitate the internal road layout were limited to creating openings in six hedgerows.

5.9 Two Category C hedgerows and one Category C tree, T39 is shown to be removed to facilitate areas shown for development parcels.

5.10 In summary, the small amount of tree material required for removal in order to facilitate the proposals would not be considered from an arboricultural perspective to significantly reduce the overall amenity value provided by the surveyed tree cover. The majority of trees will be retained and will provide a high quality setting for the proposed new development.

Impacts to TPO Trees

5.11 Table 4 below summarises the impact on tree stock afforded protection by Hinkley and Bosworth Borough Council Tree Preservation Order.

Table 4: Impacts to TPO Trees

TPO/Conservation Area reference no.	To be Removed
Ratby Conservation Area	No
(TPO) 0801/18/04	No

5.12 The granting of planning permission would override the protection afforded by the Tree Preservation Order or Conservation Area Designation to those trees shown as removed to facilitate the proposals within the approved plans and there would be no need to ask for separate consent for works to these trees.

5.13 Prior to any tree surgery and / or felling of protected trees not identified as removed within approved plans it will be necessary to apply to the relevant local planning authority to gain consent for the works.

Discussion

5.14 In conclusion for arboriculture, the proposals are considered to meet the aims and objectives of local and national policy through careful consideration of the design and retention of a high proportion of the existing tree cover. The retention of, coupled with targeted future management and enhancement of the existing and future tree cover will meet many of the individual aspirations set out in the various policies.

5.15 In a subsequent Reserved Matters application, the final layout of the scheme should be informed by this assessment. The routing of below ground services should also consider retained trees and should not encroach within the Root Protection Areas of retained trees, as recommended by the guidance given in section 7.7 of BS5837.

6.0 NEW TREE AND HEDGEROW PLANTING

6.1 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions.

6.2 Wherever possible, following discussions with the developer and utility companies, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.

6.3 Tree planting should be avoided where they may obstruct overhead power lines or cables. Any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

6.4 As part of the subsequent reserved matters application, should the application be approved, an adequate quantity of structured tree planting should be provided to mitigate for any tree removal necessary to implement the development. The purpose and function of this new tree planting should be understood from the start of any design stages so that key objectives from a landscape perspective can also be achieved.

6.5 The landscaping scheme should consider the use of both native tree species (for their low maintenance requirements and nature conservation value) and ornamental species (for their contribution to urban design and amenity value). Species choices should be selected on the basis of their suitability for the final site use. Furthermore, during the design process consultation should be made with the Local Planning Authority to obtain information on their tree strategy and

incorporate the planting proposals with any local policies and initiatives and/or Biodiversity Action Plans (BAP).

6.6 When deciding upon suitable tree species, careful consideration would need to be given to the following: ultimate height and canopy spread, form, habit, density of crown, potential shading effect, colour, water demand, soil type and maintenance requirements in relation to both the built form of the new development and existing properties.

6.7 Through careful species selection, the landscape scheme shall reduce the risk of trees being removed in the future on the grounds of nuisance. Nuisance can be perceived in a number of ways and vary from person to person however most commonly, within the context of trees, low overhanging branches, excessive shading, seasonal leaf fall and the misinformed perception that trees close to buildings cause damage.

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

Rooting Environment and Soil Volumes

6.9 The success of any landscaping scheme relies on an adequate provision of a high-quality rooting environment within which trees can thrive and reach their full potential. Planting trees with due care and consideration can, in the long term, provide a greater return on a schemes green investment and ensure trees remain healthy and grow to mature proportions. Healthy mature trees integrate well into the built environment; increase the maturity of the landscape; help provide a natural green and leafy urban environment in which people would want to reside whilst also benefiting local wildlife.

6.10 The planting of trees within confined urban environments should consider the use of appropriately designed planting pits specifically engineered to promote tree health and longevity. Crucially the aim will be to provide an adequate volume of quality soil for roots to suitably develop by calculating the amount of available soil volumes needed and selecting species whose mature size is compatible with the site. This is an integral component of the planning stage (Lindsey & Bassuk, 1991).

General Planting Recommendations

6.11 Wherever possible, following discussions with the developer and utility companies, common service trenches should be specified to minimise land take associated with underground service provision and facilitation access for future maintenance.

6.12 Tree planting should be avoided where they may obstruct overhead power lines or cables. Any underground apparatus should be ducted or otherwise protected at the time of construction to enable trees to be planted without resulting in future conflicts.

7.0 TREE PROTECTION MEASURES

7.1 Retained trees should be adequately protected during works through the erection of the requisite tree protection measures. These protection measures should be detailed as part of a site-specific Arboricultural Method Statement, which could be imposed as a condition of planning approval.

7.2 Measures to protect trees should follow the guidance in BS5837 and be applied where necessary for the purpose of protecting trees within the site whilst allowing sufficient access for the implementation of the proposed layout. These have been broadly summarised below.

General Information and Recommendations

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

7.4 Barriers should be erected prior to commencement of any construction work and once installed, the area protected by fencing or other barriers will be regarded as a construction exclusion zone.

7.5 Any trees that are not to be retained as part of the proposals should be felled prior to the erection of protective barriers. Particular attention needs to be given by site contractors to minimise damage or disturbance to retained specimens.

7.6 Construction access may take place within the root protection area if suitable ground protection measures are in place. This may comprise single scaffold boards over a compressible layer laid onto a geo-textile membrane for pedestrian movements. Vehicular movements over the root protection area will require the calculation of expected loading and the use of proprietary protection systems.

Tree Protection Barriers

7.7 Tree protection fencing should be fit for the purpose of excluding any type of construction activity and suitable for the degree and proximity of works to retained trees. Barriers must be maintained to ensure that they remain rigid and complete for the duration of construction activities on site.

7.8 In most situations, fencing should comprise typical construction fencing panels attached to scaffold poles driven vertically into the ground, as illustrated in Appendix B.

7.9 Where site circumstances and the risk to retained trees do not necessitate the default level of protection an alternative will be specified appropriate to the level / nature of anticipated construction activity.

Protection outside the exclusion zone

7.10 Once the areas around trees have been protected by the barriers, any works on the remaining site area may be commenced providing activities do not impinge on protected areas.

7.11 All weather notices should be attached to the protective fencing to indicate that construction activities are not permitted within the fenced area. The area within the protective barriers will then remain a construction exclusion zone throughout the duration of the construction phase of the proposed development.

7.12 Wide or tall loads etc should not come into contact with retained trees. Banksman should supervise transit of vehicles where they are near retained trees.

7.13 Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10m of a tree stem. No concrete should be mixed within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.

7.14 Notice boards, telephone cables or other services should not be attached to any part of a retained tree.

7.15 Any trees which need to be felled adjacent to or are present within a continuous canopy of retained trees, must be removed with due care (it may be necessary to remove such trees in sections).

8.0 TREE MANAGEMENT

8.1 The layout of the development is currently reserved for subsequent approval. During a reserved matters application pursuant to layout, a review of the relationship between the layout and the retained trees should be undertaken by a qualified arboriculturist to assess the existing tree cover and prepare a schedule of tree works.

8.2 All retained trees should be subjected to sound arboricultural management as recommended within section 8.8.3 of BS5837 *Post Development Management of Existing Trees,* where there is a potential for public access to satisfy the landowner's duty of care.

8.3 Landowners responsible for trees, especially those within the public domain, have a legal 'duty of care' to ensure that visitors and neighbours of their land are reasonably safe and that nobody comes to harm or injury, by his or her negligence, through taking measures to reduce risks as far as is 'reasonably practical' (The Health and Safety at Work Act 1974).

8.4 To ensure that risks are reduced as far as is 'reasonably practicable' it will be necessary that, a review of the relationship between retained trees and the new development should be undertaken by a qualified arboriculturist to assess the retained tree cover and prepare a schedule of tree works.

8.5 The Occupiers Liability Act (1957 and 1984) also places a 'duty of care' to ensure that no reasonably foreseeable harm takes place due to tree defects. That duty of care should be reasonable, proportionate, and reasonably practicable when managing the risk[6].

8.6 It is currently expected that a suitably qualified Arboriculturist or tree surveyor should inspect trees with an appropriate level of regularity. The purpose of the inspections is to determine whether a tree could foreseeably cause harm by virtue of its size and physical condition.

8.7 All tree works undertaken should comply with British Standard 3998:2010 and should therefore be carried out by skilled tree surgeons. It would be recommended that quotations for such work be obtained from Arboricultural Association Approved Contractors as this is the recognised authority for certification of tree work contractors.

[6] The Health and Safety at Work Act 1974

8.8 All vegetation and, particularly, woody vegetation proposed for clearance should be removed outside of the bird-breeding season (March - September inclusive) as all birds are protected under the Wildlife and Countryside Act, 1981 (as amended) whilst on the nest. Where this is not possible, vegetation should be checked for the presence of nesting birds prior to removal by an experienced ecologist.