# BS5837:2012 Tree Survey Land at Muffins Gap Lombard Street Orston Nottinghamshire NGR SK76797 40787 

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## 1. Introduction

### 1.1 Site Description and Location

The site surveyed comprises an area of residential garden lying to the rear of Muffins Gap, Lombard Street, Orston, Nottinghamshire centred at NGR SK76797 40787. The location of the site is shown on the plan within Figure 1 and an aerial photograph has been provided within Figure $\mathbf{2}$ to place the site in context.

The site lies within the Borough of Rushcliffe and is not within the designated Orston Conservation Area, the boundary of which encompasses the residential property and front garden area but does not extend past this to include the rear garden area. Consultation with Rushcliffe Borough Council has not identified any Tree Preservation Orders associated with the land to the rear of the property.

In order to facilitate an application to obtain permission to develop the area surveyed the Applicant has requested a BS5837 (2012) Tree Survey should be completed to assess the quality of the trees within and close to the boundary of the field and the impact any development may have on these. An inspection of the site was completed on 28 October 2020. A photographic record of the trees at the site is included within the report.

Figure 1: Site location.


### 1.2 Neighbouring Land Uses

The defined site area comprises a residential garden with mown lawn areas, planted borders and trimmed boundary hedgerows within which a number of specimen trees have been planted by the current owner, primarily along the southern boundary of the garden. The property in on the southern edge of the village or Orston with housing to the north and south east. To the west and south are pen agricultural fields. To the east, on the opposite side of Lombard Street are also open agricultural fields. A contextual aerial photograph is provided below.


Figure 2: Site Contextual Aerial Photograph
Image copyright Microsoft Corporation 2020
In undertaking the tree survey the assessment has been carried out in accordance with the specifications contained within BS 5837 Trees in Relation to Design, Development and Construction (2012). An inspection of the site and the immediate surrounding areas was completed by Christopher Barker, dipHort, CEnv, an experienced arboricultural consultant and licensed bat worker.

## 2. Tree Survey Appraisal Methodology

### 2.1 Survey Objectives

This tree survey has been carried out with the objective of:

- Identifying the individual tree species present at the site by means of visual inspection;
- To define the approximate age, condition and canopy spread of all individual mature and semi-mature trees identified and the value of these within the development context;
- To identify any trees that present a risk to existing or proposed foundations or other structures that may be constructed on the site and recommend action to remove this risk; and
- Recommend tree management / mitigation measures where appropriate.

The survey broadly assessed the condition and arboricultural value of the trees lying in or adjacent to the site area, paying attention to any mature individual trees present within or adjacent to the site area in order to prepare an assessment in accordance with BS 5837 Trees in Relation to Design, Development and Construction (2012).

### 2.2 Survey Methodology

The methodology set out below is a summary of the suggested approach to tree assessment as described in British Standard 5837:2012.

Trees have been broadly assessed based on guidance set out within the British Standard BS 5837:2012 'Trees in Relation to Design, Development and Construction'. This standard provides recommendations and guidance on the principles to be applied to achieve successful integration of development with trees, shrubs and hedgerows.

Trees on the site have been divided into one of four categories (based on the cascade chart for tree quality assessment). These are classed as A, B, C or U (Section 4 of BS 5837) within the table in Appendix 1. This gives an indication as to the tree's importance in relation to the site, the local landscape and, also, the value and quality of the existing trees on site.

Category (A): Trees whose retention is most desirable and are of high quality and value. These trees are considered to be in such a condition as to be able to make a lasting contribution (a minimum of 40 years).

Category (B): Trees whose retention is considered desirable and are of moderate quality and value. These trees are considered to be in such a condition as to make a significant contribution (a minimum of 20 years).

Category (C): Trees that could be retained and are considered to be of low quality and value. These trees are in an adequate condition to remain until new planting could be established (a minimum of ten years) or are young trees with a stem diameter below 150 mm .

Category (U): Trees that are considered to have no significant landscape value but it is not presumed that there is any overriding need to remove these unless stated otherwise in the description and recommendations. These include any trees in such poor condition that they cannot be retained in the context of the current land use for more than 10 years. They are for this reason not considered as being significant within the planning process.

Species have been recorded by common and scientific name. Height has been estimated in metres and stem diameter measured in centimetres unless impractical, taken at a height of 1.5 m from the base of the tree.

The overall condition of any individual tree, or group of trees, has been referred to using one of the definitions listed below. A more detailed description of condition has been noted in the Tree Schedule.

G Good: A sound tree or trees needing little, if any, attention
F Fair: A tree or trees with minor but rectifiable defects or in the early stages of stress, from which it may recover
P Poor: A tree or trees with major structural and physiological defects or stressed such that it would be very expensive and inappropriate to retain
D Dead: A tree or trees no longer alive. However, this could also apply to those trees that are dying and will be unlikely to recover, or are becoming or have become dangerous

The survey was completed from ground level only. Aerial inspections were not undertaken. Evaluations of tree conditions given within this assessment apply to the date of survey and cannot be assumed to remain unchanged, and it may be necessary to review these within 24 months, in accordance with good arboricultural practice.

### 2.3 Site Plans \& Tree schedules

The position of significant individual trees or groups of trees measured out on the site is shown on the Tree Location Plan Figure 3. Within the summary table (Appendix 1) a calculated corresponding radius of the circle for each RPA has been calculated. The Root Protection Areas are formulated to assist when designing layouts in relation to trees and the calculated RPA's in Appendix 1 should be used to inform the design layout of this site. After the initial survey was completed a conceptual development plan was prepared and this has been used to assess potential impact and prepare a Constraints Plan showing RPA's and protection areas at Figure 4.

### 2.4 Potential for Protected Species

Potential bat roost locations are described within this report using the methodology as that recommended by the Bat Conservation Trust (BCT). Each tree of significant size assessed within this survey has also been assessed for the potential to provide roosts for bats and the table in Appendix 1 includes reference to this. Table 1 below classifies the potential categories as accurately as possible. This table is based upon Table 8.4 in Bat Surveys- Good Practice Guidelines

| Tree category | Survey / mitigation requirements | Trees within <br> this category. |
| :--- | :--- | :--- |
| Category 1 <br> Confirmed bat roost with field <br> evidence such as slive / dead <br> bats, droppings, scratches, <br> grease marks and / or urine <br> staining. | Further assessment e.g. dusk / dawn surveys should be <br> undertaken to provide information on the roost type, <br> numbers and species of bat present. <br> Avoid disturbance where possible. Felling or other works <br> that would affect the roost would require an EPS licence <br> with like for like roost replacement as a minimum. Works <br> may also be subject to timing constraints. | None |
| Category 2a <br> Trees that have a moderate / <br> high potential to support bat <br> roosts such as significant <br> suitable cavities but no actual <br> field evidence to confirm the <br> presence of bats. | Further assessment e.g. dusk / dawn surveys should be <br> undertaken to confirm the presence / absence of <br> roosting bats. <br> Ino bats are found avoid disturbance if possible or <br> resurvey immediately prior to felling. Use soft felling <br> techniques and avoid direct disturbance of cavities <br> during felling. | None |

## 3. Tree Survey Findings

### 3.1 Survey Details

The tree inspection took the form of a walkover inspection completed by Christopher Barker dipHort, CEnv. Each individual semi-mature or mature tree of significance that could be impacted by any proposed new development within the survey area was identified, visually inspected and classified. The character of the trees at the site is shown in photographs contained within this section.

### 3.2 Mature and Semi-Mature Trees

A total of thirty-nine individual trees and four tree groups have been identified and assessed as part of the tree survey. The majority of the trees are situated around the boundaries of the garden area but there is a concentration of small fruit trees and amenity trees (T1 - G11 inclusive) in the south eastern corner of the garden close to the existing house.


Trees G12-G29 are situated along the southern boundary of the garden within or close to the boundary hedge although individual tree T17 and T18 are positioned in an island border within the lawn within the garden interior.

These trees represent some of the better specimens planted within the garden with a number being placed within Categories A and B. Supported by the boundary hedgerow these trees providing screening and shelter to the garden within a linear canopy. However, crowding is becoming an issue and some thinning is advisable to retain good quality individual specimen trees for the future.


G11 and T12
T12 - T16


T17 and T18
T19 and T20


T21 - T25
T26 - G29
Trees T30 - T37 are situated on or close to the western and north western boundaries of the garden. For the most part these are young trees of limited stature but some are of good quality with sufficient space to develop in the future and have been placed into Category B. However, Ash T34 in the north western corner of the garden is an over-mature specimen in severe decline and this individual tree has been placed into Category U .

The remaining trees T38-G43 are situated within island beds in the interior of the garden in the centre and eastern areas of the land surveyed.


T32


T38 - T40


G42



## 4. Tree Management

### 4.1 Initial Arboricultural Assessment

In the context of this site the proposed development is to comprise three new detached residential houses with an access along the south side of Muffins Gap from Lombard Street. The table below summarises the potential impact of the proposed development based on the plan provided taking into account arboricultural recommendations within this tree survey.

| Tree | Category | Impact of development |
| :--- | :---: | :--- |
| T1 Norway Maple | B2 | Retained. No loss of RPA of canopy work required. |
| G2 4 X Birch | B2 | Retained. No loss of RPA of canopy work required. |
| T3 Cherry | C2 | Removed to facilitate the development. |
| T4 Willow Leaved Pear | C2 | Removed to facilitate the development. |
| T5 Leylandii | C2 | Removed to facilitate the development. |
| T6 Apple | U | Shown as retained with minor loss of RPA on the west side. <br> Consider removing and replacing with a better specimen tree <br> such as Hornbeam. |
| T7 Apple | C2 | Removed to facilitate the development. |
| T8 Apple | C2 | Removed to facilitate the development. |
| T9 Apple | C2 | Removed to facilitate the development. |
| T10 Plum | C2 | Removed to facilitate the development. |
| G11 Cherry <br> 3 x Apple | C2 | One individual Cherry tree at the eastern end of the group <br> retained. Apple trees removed. No other impact from the <br> development. |
| T12 Walnut | C2 | Removed to facilitate the development. |
| T13 Damson | R2 | Removed to facilitate the development. |
| T14 Sycamore facilitate the development. |  |  |
| T15 Oak | B2 | Minor loss of RPA on the northern edge. Loss offset by the <br> removal of trees competing for space along this boundary. |
| T16 Ornamental Thorn | C2 | Removed to facilitate the development. |
| T17 Norway Maple | B2 | Removed to facilitate the development. |
| T18 Atlantic Cedar | B2 | Removed to facilitate the development. |
| T19 Lime | B2 | Removed to facilitate the development. |
| T20 Birch | B2 | Removed to facilitate the development. |
| T21 Oak | B2 | Removed to facilitate the development. |
| T22 Field Maple | B2 | Removed to facilitate the development. |
| T23 Grey Alder | C2 | Removed to facilitate the development. |
| T24 Horse Chestnut | C2 | Retained. No impact arising from the development. |
| T25 Oak | A2 | Retained. No impact arising from the development. |
| T26 Norway Maple | A2 | Retained. No impact arising from the development. |
| T27 Oak | B2 | Retained. No impact arising from the development. |
| T28 Horse Chestnut | B2 | Retained. No impact arising from the development. |
| G29 Cherry, Ash <br> Oak | B2 | Retained. No impact arising from the development. |
| T30 Birch | B2 | Retained. No impact arising from the development. |
| T31 Birch | Removed to facilitate the development. |  |


| T32 Norway Maple | B2 | Retained. No impact arising from the development. |
| :--- | :--- | :--- |
| T33 Grey Alder | B2 | Retained. No impact arising from the development. |
| T34 Ash | U | Shown as retained with minor loss of RPA on the south <br> eastern side. Consider removing and replacing with a new <br> specimen tree such as Oak. |
| T35 Birch | B2 | Removed to facilitate the development. |
| T36 Birch | B2 | Removed to facilitate the development. |
| T37 Norway Maple | B2 | Removed to facilitate the development. |
| T38 Crack Willow | C2 | Removed to facilitate the development. |
| T39 Cherry | C2 | Removed to facilitate the development. |
| T40 Whitebeam | C2 | Removed to facilitate the development. |
| T41 Cherry | C2 | Removed to facilitate the development. |
| G42 4 X Birch | C2 | Retained. No impact arising from the development. |
| G43 3 x Cherry | B2 | Retained. No impact arising from the development. |

Based on the development plan provided, twenty six of the forty-three trees and tree groups within the rear garden area will be removed to facilitate the development. These comprise eleven category B trees and fifteen category C trees. The majority of the Category B trees and both category A trees have been retained and can be protected during any proposed construction works.

It is recommended that Apple T6 and Ash T34 shown as being retained in the development plan should instead be removed for arboricultural reasons and replaced with new specimen trees in the same locations.

### 4.2 General Recommendations

The trees along the boundaries of the site that are being retained. will need to be adequately protected during any approved development works where the canopies or calculated root protection areas extend across the field boundary. As a general rule at this site, measures to protect trees should follow the best practice principles set out in BS5837: Trees in Relation to Design, Development and Construction (2012). Prior to any construction or development work proceeding, the RPA's of individual trees to be retained should be marked out using the distances provided in the table within Appendix 1.

Marking out should be completed by a person with arboricultural or horticultural expertise as individual trees will have root zones that may be affected by local conditions and allowances will need to be made to accommodate this. The best practice principles have been broadly summarised below.

- All trees retained adjacent to the site should be protected by barriers or ground protection around the calculated Root Protection Area (RPA) and as indicated on any Tree Constraints Plan (TCP) that may be produced in association with the assessment.
- Any fencing required should be erected prior to commencement of construction and before demolition including erection of any temporary structures. Once set up fences should not be removed or altered without prior consultation with the arboricultural advisor.
- Arrangements should be made for an arboriculturalist to supervise works and tree protection where trees are particularly vulnerable or sited close to access points.
- Pre-development works may be undertaken prior to the installation of fencing with the agreement of the local planning authority.
- All tree works should follow best practice procedures as set out in BS 3998 (2010). All trees should be maintained in good condition on site and be inspected annually (where overall condition requires) or every 2 years and after any major storm events, with safety a priority.
- Fencing should be clearly visible and suitable for the location, type and proximity of construction activity.


1. Standard scaffold poles
2. Heavy Guage 2 m tall galvanised tube and weld mesh infill panels
3. Panels secured to uprights and cross members with wire ties
4. Ground Level
5. Uprights driven into ground until secure (up to 0.6 m )
6. Standard scaffold clamps

- It may be appropriate on some sites to use temporary site offices as components of the protection barriers.
- Where it has been agreed and shown on a Tree Protection Plan, construction access may take place within the RPA if suitable ground protection measures are in place (e.g. existing surfaced car park areas). In other areas this may comprise single scaffold boards over a compressible layer laid onto geo-textile materials for pedestrian movements. Vehicular movements over the RPA will require the calculation of expected loading and may require the use of proprietary protection systems.
- Once areas around trees have been protected by fencing, any works on the remaining site area may be commenced providing activities do not impinge on protected areas. Notices should be placed on fencing to indicate that operations are not permitted within the fenced area.
- Wide or tall loads etc. should not come into contact with retained trees. Banksman should supervise transit of vehicles, jibs, booms etc. where this is in close proximity to retained trees.
- Oil, bitumen, cement or other material that is potentially injurious to trees should not be stacked or discharged within 10 m of a tree bole. No concrete mixing should be done within 10m of a tree. Allowance should be made for the slope of ground to prevent materials running towards the tree.
- No fires will be lit where flames are anticipated to extend to within 5 m of tree foliage, branches or trunk, taking into consideration wind direction and size of fire.
- Notice boards, telephone cables or other services should not be attached to any part of a retained tree.
- Where it is deemed necessary to operate a wide or tall load, plant bearing booms, jibs and counterweights or other such equipment, as part of construction works, and such equipment would have potential to cause injurious contact with crown material i.e. Iow branches and limbs, of retained trees within the RPA fencing, it is best advised that appropriate, but limited tree surgery, be carried out beforehand to remove any obvious problem branches. This is classed as 'Facilitation Pruning' within BS 5837 (2012). Any such pruning should be undertaken in accordance with a specification prepared by an arboriculturalist.
- It is advised that a Pre-Commencement Site Meeting is held with contractors who are responsible for operating machinery, as described above. To firstly highlight the potential for damage occurring to tree crowns and to ensure that extra care is applied when manoeuvring machinery during such operations within close proximity to retained trees to avoid any contact.
- In the event of having caused any such branch or limb damage to retained trees it is strongly recommended that suitable tree surgery be carried out, in accordance with BS 3998 (2010) Recommendations for Tree Work, to correct the damage, upon completion of development.


Christopher Barker CEnv dipHort

## Appendix 1: BS5837 Tree Schedule

| Key: | Measurements | Age - Class | Overall Condition | BS 58372012 : Cascade Chart for Quality Assessment/Retention Category | Symbols: |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | MS - Multi-stemmed | YNG-MAT-Young Mature | G - Good | A - High | < = less than |
|  | Ht - Height in metres | SM - Semi-mature | F - Fair | B - Moderate | ~ = approximately |
|  | Stem - Stem Diameter at 1.5 m in mm | Mat - Mature | P - Poor | C - Low | > = greater than |
|  | Crown - Crown spread in metres | OM - Over mature | D - Dead | U - Trees of negligible significance |  |
|  | TD - Trunk division (height in metres) | Est Yrs - estimate of years remaining (>40 years; 20-40 years; <20 years) |  | Sub-categories: <br> 1 = mainly arboricultural values <br> 2 = mainly landscape values <br> 3 = mainly cultural values. |  |

 1.5 m above ground level).

| Tree | Species | $\begin{gathered} \mathrm{Ht} \\ (\mathrm{~m}) \end{gathered}$ | Stem <br> Diam <br> mm@ <br> 1.5 m | Canopy Spread (m) | Height of Crown Clearance | Age Class | Est yrs | Overall Condition | Structural condition | Recommendations | BS 5837 <br> Category | RPA Radius (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T1 | Norway Maple Acer platanoides | 7 | 455 | $\begin{aligned} & \mathrm{N}-4 \\ & \mathrm{~S}-4 \\ & \mathrm{E}-4 \\ & \mathrm{~W}-4 \end{aligned}$ | 3 | M | 20 | F | Single trunk. Long vertical cavity. Raised round crown. <br> Negligible roost potential. No structural faults visible from ground level but cavity needs to be monitored. | Monitor trunk wound. | B2 | 5.4 |
| G2 | 4 X Birch Betula pendula | $\begin{aligned} & 10- \\ & 12 \end{aligned}$ | 355 | $\begin{aligned} & \hline \mathrm{N}-4 \\ & \mathrm{~S}-4 \\ & \mathrm{E}-4 \\ & \mathrm{~W}-4 \end{aligned}$ | 2 | SM | 20+ | G | Group of merging irregular canopies. Negligible roost potential. No structural faults visible from ground level | None. | B2 | 4.2 |
| T3 | Cherry Prunus avium | 6 | 380 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-2 \end{aligned}$ | 3 | SM | 10 | F | Upright ascending canopy. Negligible roost potential. No structural faults visible from ground level | None | C2 | 4.5 |
| T4 | Willow Leaved Pear <br> Pyrus salicifolia | 5 | 185 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-4 \end{aligned}$ | 3 | M | 10+ | G | Sound dense raised canopy. Negligible roost potential. No structural faults visible from ground level | None | C2 | 2.2 |
| T5 | Leylandii Cupressocyparis Leylandii | 5 | 210gl | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \end{aligned}$ | 0 | SM | 10 | F | Columnar closely trimmed. Negligible roost potential. No structural faults visible from ground level | . None. | C2 | 2.5 |
| T6 | Apple Malus Cul | 6 | 425 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-4 \\ & \mathrm{E}-4 \\ & \mathrm{~W}-4 \end{aligned}$ | 2 | OM | <10 | P | Irregular lifted crown. Large black fungus bracket on trunk. Negligible roost potential. In decline. | Shown as retained within the development plan but replacement with a new specimen tree is recommended. | U | 5.1 |


| Tree No | Species | $\begin{gathered} \mathrm{Ht} \\ (\mathrm{~m}) \end{gathered}$ | Stem <br> Diam <br> mm@ <br> 1.5m | Canopy Spread (m) | Height of Crown Clearance | Age Class | Est <br> yrs | Overall Condition | Structural condition | Recommendations | BS 5837 <br> Category | RPA Radius (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T7 | Apple Malus Cul | 5 | 410 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-4 \end{aligned}$ | 2 | OM | 10 | F | Irregular crown extending west. Negligible roost potential. No structural faults visible from ground level | Poor quality. Consider removal. | C2 | 4.9 |
| T8 | Apple Malus Cul | 5 | 240 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-3 \\ & \hline \end{aligned}$ | 1 | M | 10 | F | Round canopy leaning east. Negligible roost potential. No structural faults visible from ground level | None | C2 | 2.8 |
| T9 | Apple Malus Cul | 4 | 165 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \\ & \hline \end{aligned}$ | 1 | SM | 10 | F | Round small canopy. Negligible roost potential. No structural faults visible from ground level | None | C2 | 1.9 |
| T10 | Plum Prunus sp | 6 | 180 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-1 \\ & \mathrm{~W}-2 \end{aligned}$ | 2 | SM | 10 | F | Round canopy extending north. Spur on south side. <br> Negligible roost potential. <br> No structural faults visible from ground level | None | C2 | 2.1 |
| T11 | Cherry Prunus avium $3 \times$ Apple Malus CUL | 4-5 | <200 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \end{aligned}$ | 1 | SM | 10 | F | Three merging fruit trees. Negligible roost potential. No structural faults visible from ground level | None but may require thinning out. | C2 | 2.4 |
| T12 | Walnut Juglans nigra | 10 | 370 | $\begin{aligned} & \hline \text { N-5 } \\ & \text { S- } \\ & \mathrm{E}- \\ & \mathrm{W}- \end{aligned}$ | 2 | SM | 20+ | G | Round canopy divides from 0.5magl. Negligible roost potential. No structural faults visible from ground level | None | B2 | 4.4 |
| T13 | Damson Prunus domestica | 8 | 240 | $\begin{aligned} & \mathrm{N}-4 \\ & \mathrm{~S}- \\ & \mathrm{E}- \\ & \mathrm{W}- \end{aligned}$ | 2 | M | 10 | F | Irregular crown lacking space. Internal regeneration. Negligible roost potential. No structural faults visible from ground level | Consider removal to provide space. | C2 | 2.8 |
| T14 | $\begin{gathered} \text { Sycamore } \\ \text { Acer } \\ \text { pseudoplatanus } \end{gathered}$ | 15 | 440 | $\begin{aligned} & \text { N-5 } \\ & \text { S- } \\ & \mathrm{E}- \\ & \mathrm{W}- \end{aligned}$ | 2 | M | 20+ | G | Round balanced canopy with minor ivy. Negligible roost potential. No structural faults visible from ground level | Remove ivy growth. | B2 | 5.2 |
| T15 | Oak Quercus petraea | 7 | 440 | $\begin{gathered} \mathrm{N}-4 \\ \mathrm{~S}- \\ \mathrm{E}- \\ \mathrm{W}- \end{gathered}$ | 3 | SM | 20+ | G | Irregular crown extending east. Negligible roost potential. No structural faults visible from ground level | None | B2 | 5.2 |


| Tree No | Species | $\begin{gathered} \mathrm{Ht} \\ (\mathrm{~m}) \end{gathered}$ | Stem <br> Diam <br> mm@ <br> 1.5m | Canopy Spread (m) | Height of Crown Clearance | Age Class | Est yrs | Overall Condition | Structural condition | Recommendations | BS 5837 <br> Category | RPA Radius (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T16 | Ornamental Thorn Crataegus sp | 4 | 170 | N-2 <br> S-2 <br> E-2 <br> W-4 | 1 | M | 10 | F | Round crown extending west with internal and basal regeneration. Negligible roost potential. No structural faults visible from ground level | None | C2 | 2.0 |
| T17 | Norway Maple Acer platanoides | 8 | 315 | $\begin{aligned} & \mathrm{N}-4 \\ & \mathrm{~S}-5 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-4 \end{aligned}$ | 2 | M | 20 | F | Unbalanced crown trimmed on east side. <br> Negligible roost potential. No structural faults visible from ground level | Consider reducing and balancing canopy. | B2 | 3.7 |
| T18 | Atlantic Cedar Cedrus atlantica | 7 | 255 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \end{aligned}$ | 1 | SM | 20+ | G | Pyramidal crown with minor dead wood throughout. <br> Negligible roost potential. No structural faults visible from ground level | Remove dead wood and reassess | B2 | 3.0 |
| T19 | Lime Tilia cordata | 10 | 270 | $\begin{aligned} & \mathrm{N}-4 \\ & \mathrm{~S}-4 \\ & \mathrm{E}-4 \\ & \mathrm{~W}-4 \end{aligned}$ | 1 | SM | 20 | F | Single trunk with cavity and decay present at 1 magl. Round canopy. Negligible roost potential. No structural faults visible from ground level but cavity needs to be monitored. | Monitor cavity and structural condition if retained. | B2 | 3.2 |
| T20 | Birch <br> Betula pendula | 9 | 260 | $\begin{aligned} & \hline \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \end{aligned}$ | 1 | SM | 20+ | G | Upright slightly pendulous crown. Negligible roost potential. No structural faults visible from ground level | None | B2 | 3.1 |
| T21 | Oak Quercus petraea | 10 | 245 | $\begin{aligned} & \mathrm{N}-4 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \\ & \hline \end{aligned}$ | 2 | SM | 20+ | G | Ascending crown extending north. Negligible roost potential. No structural faults visible from ground level | None | B2 | 2.9 |
| T22 | Field Maple <br> Acer campestre | 7 | 260 | $\begin{aligned} & \hline \text { N-5 } \\ & \text { S- } \\ & \mathrm{E}- \\ & \mathrm{W}- \end{aligned}$ | 2 | SM | 20+ | G | Ascending crown extending north Negligible roost potential. No structural faults visible from ground level | None | B2 | 3.1 |
| T23 | Grey Alder Alnus incana | 10 | 185 | $\begin{aligned} & \text { N-3 } \\ & \text { S- } \\ & \text { E- } \\ & \text { W- } \end{aligned}$ | 3 | Y | 10 | F | Irregular crown lacking space and extending north. <br> Negligible roost potential. No structural faults visible from ground level | None | C2 | 2.2 |


| Tree No | Species | $\begin{gathered} \mathrm{Ht} \\ (\mathrm{~m}) \end{gathered}$ | Stem <br> Diam mm@ 1.5m | Canopy Spread (m) | Height of Crown Clearance | Age Class | Est yrs | Overall Condition | Structural condition | Recommendations | BS 5837 <br> Category | RPA Radius (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T24 | Horse Chestnut Aesculus hippocastenum | 8 | 325 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-4 \\ & \mathrm{~W}-4 \end{aligned}$ | 2 | SM | 10 | F | Round balanced crown with minor indications of early canker. <br> Negligible roost potential. No structural faults visible from ground level | Monitor for canker infection. | C2 | 3.9 |
| T25 | Oak Quercus petraea | 10 | 170 | $\begin{aligned} & \hline \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \\ & \hline \end{aligned}$ | 2 | Y | 40 | G | Good shape and balance Negligible roost potential. No structural faults visible from ground level | None. Priority tree of landscape value. | A2 | 2.0 |
| T26 | Norway Maple Acer platanoides | 9 | 250 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-2 \end{aligned}$ | 2 | SM | 40 | G | Good shape and balance. Negligible roost potential. No structural faults visible from ground level | None Priority tree of landscape value. | A2 | 3.0 |
| T27 | Oak Quercus petraea | 10 | 260 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \end{aligned}$ | 2 | SM | 20+ | G | Good shape and balance. Negligible roost potential. No structural faults visible from ground level | None | B2 | 3.1 |
| T28 | Horse Chestnut Aesculus hippocastenum | 7 | 290 | $\begin{aligned} & \text { N-3 } \\ & \text { S-3 } \\ & \text { E-3 } \\ & \text { W-3 } \end{aligned}$ | 2 | SM | 20+ | G | Good shape and balance. Negligible roost potential. No structural faults visible from ground level | None | B2 | 3.4 |
| T29 | Cherry Ash Oak | $\begin{aligned} & 10- \\ & 16 \end{aligned}$ | <340 | $\begin{aligned} & \hline \text { N-5 } \\ & \text { S- } \\ & \text { E- } \\ & \text { W- } \end{aligned}$ | 2 | SM | 20 | F | Merging irregular canopies. Category 2B roost potential. No structural faults visible from ground level | Some thinning would be beneficial | B2 | 4.0 |
| T30 | Birch <br> Betula pendula | 14 | 200 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-2 \\ & \hline \end{aligned}$ | 2 | SM | 20+ | G | Upright crown Negligible roost potential. No structural faults visible from ground level | None | B2 | 2.4 |
| T31 | Birch <br> Betula pendula | 12 | 140 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-1 \end{aligned}$ | 2 | Y | 10 | F | Upright crown. Negligible roost potential. No structural faults visible from ground level | None | C2 | 1.8 |
| T32 | Norway Maple Acer platanoides | 8 | 230 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-2 \end{aligned}$ | 2 | Y | 20+ | G | Upright ascending canopy extending north. <br> Negligible roost potential. No structural faults visible from ground level | None | B2 | 2.7 |


| Tree No | Species | $\begin{gathered} \mathrm{Ht} \\ (\mathrm{~m}) \end{gathered}$ | Stem Diam mm@ 1.5m | Canopy Spread (m) | Height of Crown Clearance | Age Class | Est yrs | Overall Condition | Structural condition | Recommendations | BS 5837 <br> Category | RPA Radius (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T33 | Grey Alder Alnus incana | 7 | 210 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-1 \\ & \mathrm{~W}-2 \end{aligned}$ | 0 | SM | 20 | F | Upright crown with basal regeneration. Negligible roost potential. <br> No structural faults visible from ground level | None | B2 | 2.5 |
| T34 | Ash Fraxinus excelsior | 6 | 280 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \end{aligned}$ | 2 | OM | <10 | P | Sparse crown in severe decline with ivy growth. <br> Category 2B roost potential. No structural faults visible from ground level | Shown as retained within the development plan but replacement with a new specimen tree is recommended. | U | 3.3 |
| T35 | Birch Betula pendula | 8 | 260 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-4 \\ & \mathrm{~W}-2 \end{aligned}$ | 2 | M | 20 | F | Leans slightly east and crown extends east. <br> Negligible roost potential. No structural faults visible from ground level | None | B2 | 3.1 |
| T36 | Birch Betula pendula | 8 | 190 | $\begin{aligned} & \text { N-2 } \\ & \mathrm{S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-1 \end{aligned}$ | 2 | Y | 20 | F | Upright crown. Negligible roost potential. No structural faults visible from ground level | None | B2 | 2.2 |
| T37 | Norway Maple Acer platanoides | 5 | 175 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \end{aligned}$ | 2 | Y | 20 | F | Broadly ascending canopy. Negligible roost potential. No structural faults visible from ground level | None | B2 | 2.1 |
| T38 | Crack Willow Salix fragilis | 10 | 480gl | $\begin{aligned} & \mathrm{N}-4 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-4 \end{aligned}$ | 2 | SM | 10 | F | Irregular canopy extending north west, Basal and internal regeneration. <br> Negligible roost potential. No structural faults visible from ground level | None | C2 | 5.7 |
| T39 | Cherry Prunus avium | 10 | 280 | $\begin{aligned} & \mathrm{N}-1 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \end{aligned}$ | 1 | M | 10 | P | Crown lacks space and is suppressed on the north side. Minor dead wood throughout. Negligible roost potential. No structural faults visible from ground level | Consider removal for arboricultural reasons. | C2 | 3.3 |
| T40 | Whitebeam Sorbus aria | 5 | 275 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \end{aligned}$ | 1 | SM | 10 | F | Wound on north side of trunk with decay visible. Irregular canopy. Negligible roost potential. No structural faults visible from ground level but monitor trunk decay. | Monitor condition if retained. | C2 | 3.3 |


| $\begin{aligned} & \text { Tree } \\ & \text { No } \end{aligned}$ | Species | $\begin{gathered} \mathrm{Ht} \\ (\mathrm{~m}) \end{gathered}$ | Stem Diam mm@ 1.5 m | Canopy Spread (m) | Height of Crown Clearance | Age Class | $\begin{aligned} & \text { Est } \\ & \text { yrs } \end{aligned}$ | Overall Condition | Structural condition | Recommendations | BS 5837 <br> Category | RPA Radius (m) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| T41 | Cherry Prunus sp | 4 | 155 | $\begin{aligned} & \mathrm{N}-2 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \end{aligned}$ | 1 | M | 10 | P | Trunk leans to the north. Irregular crown extending south east. Internal regeneration. <br> Negligible roost potential. <br> No structural faults visible from ground level | Consider removal for arboricultural reasons. | C2 | 1.8 |
| G42 | $4 \times$ Birch Betula pendula | 5-6 | <150 | $\begin{aligned} & \hline \mathrm{N}-2 \\ & \mathrm{~S}-2 \\ & \mathrm{E}-2 \\ & \mathrm{~W}-2 \\ & \hline \end{aligned}$ | 1 | Y | 10 | F | Merging canopies. Negligible roost potential. No structural faults visible from ground level | None | C2 | 1.8 |
| G43 | $3 \times$ Cherry Prunus sp | 6-7 | <175 | $\begin{aligned} & \mathrm{N}-3 \\ & \mathrm{~S}-3 \\ & \mathrm{E}-3 \\ & \mathrm{~W}-3 \end{aligned}$ | 1 | SM | 20+ | G | Merging canopies adjacent to fastigiate Cypress. <br> Negligible roost potential. No structural faults visible from ground level | None | B2 | 2.1 |

