# PEACOCK TREE CONSULTANCY 

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## Arboricultural Report

| Title: | Arboricultural Impact Assessment, Arboricultural Method <br> Statement and Tree Protection Plan, for the development of: <br> 'Nostra Domus', Lyme Road, Uplyme DT7 3XA. |
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| Instructed by: | Mr S Forster <br> 'Nostra Domus' <br> Lyme Road <br> Uplyme <br> DT7 3XA |
| Prepared by: $\quad$A S Peacock <br> ABC Level 6 Diploma in Arboriculture |  |
| Date: $\quad$9 February 2024 <br> Reference:$\quad$ APPA100124/1 |  |

### 1.0 Introduction

1.1 This Arboricultural Report is to accompany an Application to East Devon Council for outline planning permission to develop 'Nostra Domus', Lym Uplyme DT7 3XA.
1.2 The proposal seeks to construct four new dwellings as well as enlarging the exis building (a detached bungalow) with a first floor extension and adjoining However, there are multiple trees and hedges located throughout the site which may be impacted by the proposal. I have been instructed to provide arboricultural advic how to minimise the impact to the trees and ensure their long term retention.
1.3 I am Alex Peacock, a qualified and independent arboriculturist. A summary qualifications, experience and professional memberships are included at Appendix 3.
1.4 This Arboricultural Report is based on recommendations and guidance se British Standard 5837:2012 Trees in relation to design, demolition and constructior Recommendations. J ustification will be provided if any course of action deviates fro these recommendations.
1.5 I carried out a tree survey inspection on 6 December 2023 to record information abol the trees with a stem diameter of 75 mm or more, on and adjacent to the site. Details 0 the survey are included in the Tree Survey Schedule at Appendix 1. An Explanatory Key to the Tree Survey Schedule is included at Appendix 2.


Photograph 1 - Illustrating the existing bungalow 'Nostra Domus’.

### 2.0 Arboricultural Impact Assessment (AIA)

## Loss of trees to facilitate the development

2.1 In total there are three trees which require removal in order to facilitate this proposal as the trees are positioned within the footprint of the development area. Loss of 1 trees is considered to be of a moderate impact overall, due to the loss of the bene the trees currently provide. Nevertheless, if the trees are to be retained it will resull excessive pressure on the remaining trees at the site in order to implement the desigr The removal of these trees will allow larger areas of root zone to remain undisturbed for the retained trees, reducing the impact of the development on them and helpi ensure their long term retention.
2.2 Of the three trees to be removed, the most significant loss is T13 which is an e mature ash tree that is a ' B ' category specimen. The resulting loss of amenity value wil be low because the tree is not visible from any public highways or $r$ properties. Many of the ash trees in this area are suffering from ash dieback diseast (Hymenoscyphus fraxineus) and although symptoms are not yet pronounced within this tree, it is highly likely an infection will develop over the next 5-10 years. Given that th majority of trees at this plot are ash trees, the removal of this tree gives an opportuni to replant with an alternative species, increasing diversity and inducing resilience to the tree stock.
2.3 T5 is an ash tree and also one of the three trees which requires removal, how contrary to T 13 , the tree is currently showing advanced symptoms of ash di disease, i.e. dieback of branches and epicormic growth are visible through crown. The tree is subsequently graded as a ' C ' category specimen with a reter span of just $10+$ years. Loss of this tree is deemed to be of a low impact as a re and can be mitigated with replacement planting to minimise the impact for the reason detailed above.
2.4 The third tree which requires removal to facilitate this proposal is T12, a hawthorn th: has been graded as a 'C' category. The tree is an untidy specimen with an imbalance, form and abrasions on its stem where rampant ivy growth was cut away approximatel 5 years ago. The tree offers little contribution to amenity because it is not visible fro any public highways or residential properties. Loss of this tree is therefore deemed be of a low impact.

## Other tree work required

2.5 In addition to the loss of the above three trees, there are four ash trees which are ir poor structural condition and require removal for safety reasons and cannot realistically be retained in the context of the current land use. Three of the trees (T3, T6 and have decay in their basses which is close to critical levels, and T10 has a long running down its stem from a past failure from wind loading. Furthermore, all trees are showing advanced symptoms of ash dieback. The loss of these trees can $k$ mitigated with replacement planting that will increase species diversity at the site.
2.6 There are two young apple trees in G3 that are located within the footprin development area. These trees are small and should not be a significant constraint development. They can easily be transplanted to an alternative location in the top fiel (designated as a planting area).
2.7 Some of the trees at the northern end of G 1 will require pruning of overhead branch $\epsilon$ to provide adequate clearance for construction traffic. This will create wounds whic will be entry points for decay fungi, plus the loss of foliage may cause a dec health. Nonetheless, this is thought to be of a low impact as the pruning wounds be small in size so the trees can occlude them quickly, maintaining normal health.

## Incursion of tree root protection areas

2.8 There will be a small amount of incursion into the root protection area (RPA) of G1 anı G4 in order to construct the new driveway. This is likely to require the severance c small amount of fibrous tree roots, and could lead to a decline in health and/or term damage to the tree's root system if decay spreads from the severance pr However, the impact to the trees is considered to be low, as the amount incursion is negligible, with all other areas of the trees' root zones undisturbed, as they are located off site and protected by a robust boundary fenc Furthermore, the excavations will be carried out under supervision of the arboriculturist, and following the guidance set out in National J oint Utilities (NJ UG) Guidance for the Planning, Installation and Maintenance of Utility Apparatus ii Proximity to Trees-Issue 2.

Future pressure for tree work
2.9 Shading caused by the trees may cause reduced light levels to the new dwt leading to future pressures for pruning. Shading in this case, is likely to be of a ls impact to the proposal, as the new dwellings have been positioned where shadin minimised, i.e. to the south side of the trees being retained. Furthermore, these trees are deciduous, so any shading will only be a problem in the summer months a likely to be seen as beneficial due to less variable building temperatures, espec during extreme heat conditions which are an increasingly frequent occurrence.

### 3.0 Points to be addressed in the Arboricultural Method Statement

An Arboricultural Method Statement is attached to this document. It provides details ( how the impacts detailed in paragraph 2.0 will be minimised/mitigat construction can be undertaken with minimal risk of adverse impact to the trees beir retained. Points to be addressed are as follows:-

- The location and specifications for tree protective barriers to protect the RPAs of a trees being retained.
- A schedule of tree work.
- A specification for replacement tree planting to mitigate the loss of the seven tre being removed.
- Details of the frequency and timings of arboricultural site monitoring.
- A description of the sequencing of operations.
- Other general precautionary measures required for construction activities outside the construction exclusion zone.


### 4.0 Disclaimers

This report is for the sole use of the above named client and refers to only those tre, identified within; use by any other person(s) in attempting to apply its contents for a other purpose renders the report invalid for that purpose.

## Alex Peacock

Alex Peacock Dip Arb $\angle 6$ ( $A B C$ )
Director of Peacock Tree Consultancy Ltd

## Arboricultural Method Statement

### 1.0 Tree Protective Barriers

1.1 Protective barriers will be installed at the locations shown on the Tree Protec Plans (included at the end of this Report). The barriers will protect Protection Areas (RPA) of all trees being retained. The locations of pro barriers must be agreed by the Local Planning Authority (LPA) b construction activity starts on site. They will remain in place until there is no risk harm from development activity. This can be controlled via the impositi planning condition on the permission for the development.
1.2 No protective barriers will be moved from their agreed location, rem temporarily dismantled, without consulting the project arboriculturist. Furthermo the condition of the fencing will be regularly monitored by the project arboriculturis to ensure it remains fit for purpose, i.e. sufficient to prevent unauthorised access or activities within the RPAs of retained trees.
1.3 Behind the protective barrier, there will be no unauthorised vehicular acces: repeated pedestrian access; no fires; no storage of excavated debris, b materials, chemicals, or fuels; no mixing of cement; no service install excavation; no raising or lowering of soil levels; and no excessive cultivatic landscape planting. Any variations to these restrictions must be agreed project arboriculturist.
1.4 The minimum specification for the protective barriers are as per the drawing below:

1.5 All-weather notices must be attached to the protective barrier with words such as: 'CONSTRUCTION EXCLUSION ZONE - NO ACCESS'

### 2.0 Tree Work

2.1 The table below is a schedule of tree work required to enable construction o proposed development:

| Tree/ <br> Group <br> No. | Species | Tag <br> No. | Work Recommendations |
| :--- | :--- | :--- | :--- |
| T5 | Ash | 1154 | Remove the tree. |
| T12 | Hawthorn | - | Remove the tree. |
| T13 | Ash | - | Remove the tree. |
| G1 | Mixed <br> species | - | Prune overhanging branches to provide 5 metres <br> clearance above the proposed driveway. |
| G3 | Mixed <br> species | -Transplant two young apple trees, relocating to the area <br> designated for planting at the centre of the site. |  |

2.2 The table below is a schedule of tree work required for safety reasons:

| Tree/ Group No. | Species | Tag No. | Work Recommendations |
| :---: | :---: | :---: | :---: |
| T3 | Ash | 1153 | Remove the tree. |
| T6 | Ash | 1155 | Remove the tree. |
| T8 | Ash | 1156 | Remove the tree. |
| T10 | Ash | - | Remove the tree. |

2.3 Tree work is to be carried out to the standards in BS 3998 (2010) Recommendations for Tree Work. It is advisable to select a contractor approved by the Arboricultu Association; their Register of Contractors is available free from The Malthi Stroud Green, Standish, Stonehouse GL10 3DL - Telephone 01242 522] website: www.trees.org.uk

### 3.0 Replacement Tree Planting

3.1 Replacement trees are to be planted to mitigate the losses of the seve scheduled for removal in paragraph 2.0 above. The specifications are shown in th table below:

| Species | Stem Girth | Con. Size | Tree Attributes | Planting Location |
| :---: | :---: | :---: | :---: | :---: |
| Cercis <br> canadensis <br> 'Forest Pansy' | $12-14 \mathrm{~cm}$ | 45 litre | Deep red/purple leaf colour. Clusters of light pink flowers in late spring. | Plot 2 - east corner of the house. |
| Cercis siliquastrum | $12-14 \mathrm{~cm}$ | 45 litre | Stunning clusters of deep pink flowers in May | Plot 4 - east of driveway. |
| Amelanchier lamarckii | Multistem | 45 litre | Highly ornamental and young red leaves in early Spring. Small berries provide summer interest. Leaves turn orange then red in Autumn | Plot 1 - northwest of the house. |
| Crataegus $x$ grignonensis | 12-14cm | 45 litre | Attractive clusters of white flowers produced in late spring. Bright red fruits mature in late autumn. Leaves remain on the tree until early winter. | Nostra Domus' east of the house. |
| Pinus sylvestris 'Fastigiata' | $12-14 \mathrm{~cm}$ | 45 litre | Evergreen tree with an upright growth habit. | Plot 3 - north of the house. |
| Liquidambar styraciflua | $12-14 \mathrm{~cm}$ | 45 litre | Spectacular autumn colour - reds, oranges and yellows. | Plot 4 - north of the house. |
| Malus trilobata | $12-14 \mathrm{~cm}$ | 45 litre | Conical crown shape with upright growth habit and bright red autumn colour. | Plot 4 - to the south-west corner of the garage. |

3.2 The replacement trees will be of a size that will provide instant impa minimum height of two metres, in a 45 litre container. The replacement trees ml be sourced from local and reputable nursery that has high quality bio: measures in place. Three 100 mm untreated rounded stakes (arranged in a triangular formation) are to be installed to provide full support to each of the trees. Mulch is $t$ be applied around the base of each tree with clean single species wood chip depth of $50-100 \mathrm{~mm}$ and a 1 m radius.
3.3 In addition to the above individual specimen trees, planting will be carried o create a small woodland area to the centre of the site to increase biodiversity (s the Tree Protection Plan for the location). The area will be fenced cff during construction to avoid compaction of the soil.
3.4 The tree stock will comprise of $40 \mathrm{~cm}-60 \mathrm{~cm}$ high, bare-rooted transplants, planted a 1.5 m spacing, and will include the following species:

- Crataegus monogyna
- Vibernum lantana
- Corylus avellana
- Acer campestre
- Euonymus europeus
- Quercus robur
- Carpinus betulus
3.5 Transplants are to be protected against damage from deer, rabbits and machin with individual plastic tree shelters (also reducing water stress and helping the plan survive in dry conditions). Tree shelters are to be Tubex Standard Range (or simila approved), 750 mm in height $\times 90 \mathrm{~mm}$ in diameter. Each shelter is to be fixed to own softwood stake, 1.4 m . in length $\times 30 \mathrm{~mm}$ width, driven into the grı 500 mm . Mulch is to be applied around the base of the shelter with clean species wood chip to a depth of $50-100 \mathrm{~mm}$ and a 1 m radius.
3.6 Regular maintenance of all of the newly planted trees will be completed for the fir five years, including watering during prolonged drought periods, weed c adjustment of tree ties and stakes, and formative pruning as necessary. Defects that become apparent during the maintenance period will be addressed by appropric remedial works, including the replacement of any trees that fail to establish.


### 4.0 Site Monitoring

4.1 Site monitoring will be undertaken by the project arboriculturist at regular interv. (approximately every 2-4 weeks). The project arboriculturist's initial role is to liai with the developer and the LPA to ensure that protective measures a purpose and in place before any works start on site. Written records of monitoring will be circulated to relevant parties.
4.2 A pre-commencement meeting will be held on site before any of the site clearan and construction work begins. This will be attended by the site manager, the projec arboriculturist, and a LPA representative (if a LPA representative cannot attend, th supervising arboriculturist will inform the LPA in writing of the detc meeting). All tree protection measures described in this Arboricultural N Statement will be fully discussed so that their implementation and sequencing ; understood by all the parties. This will include agreeing the location of th protective barriers. Any agreed clarifications or modifications to the cons details will be recorded and circulated to all parties in writing. This meeting is wher details of the programme of tree protection will be agreed and finalised, which then form the basis of any supervision arrangements between the supe arboriculturist and the developer.
4.3 Further site monitoring from the project arboriculturist will be required during worl of a sensitive nature (i.e. when development activity is to take place $n$ adjacent to RPA's), these key stages are as follows:

1. Following installation of the protective barriers and temporary ground protectic (prior to commencement of construction work).
2. During excavations within the tree root protection area of G1 and G4 to instal the driveway.
3. Prior to removal of the protective barriers and temporary ground protection the end of construction).
4. As and when additional works occur that may be sensitive to tree prote areas.

### 5.0 Additional Precautionary Measures

### 5.1 Large Plant

Any transit or traverse of large plant or vehicles, shall be conducted unc supervision of a banks-man, to ensure that adequate clearance from maintained at all times.

### 5.2 Fires

Fires on sites must be avoided if possible. Where they are unavoidable, they mı not be lit in a position where heat could affect foliage or branches. The potential size of a fire and the wind direction must be taken into account when determinii location, and it must be attended at all times until safe enough to leave.

### 5.3 Toxic Chemicals

The storage of fuels or any toxic chemicals is not permitted in RPA's. Where fuel c other chemicals are stored on site, a risk assessment will be carried out to identify $i$ emergency spillage kits are needed to restrict the environmental accidents. Soil bunding or a supporting framework covered in heavy-duty pla sheeting will be installed where there is a risk of spillages contaminating RPA's. This specifically applies to cement mixing areas and vehicle washing facilitie leachate from poured wet concrete is toxic to plants and must be prevented $f$ contaminating RPA's by using an impermeable membrane to stop any leakage int the soil.

### 5.4 Landscaping

No heavy mechanical cultivation of soil such as ploughing or rotavation is permitte within RPA's. No level changes shall occur within 1 m of the trunk unless authorise by the supervising arboriculturist. No raising of soil levels to leave soil touchir trunk that was previously exposed to the air is permitted.

### 5.5 Contractors Car Parking and Storage of Building Materials

There is ample available space on site for contractors car parking as the propı has a very large/wide driveway. Building materials are to be stored on the lawn area located to the south of the existing bungalow 'Nostra Domus'.

### 6.0 Sequencing of Operations

| 1 | Pre-commencement site <br> meeting. | Meeting on site with the project arboriculturist, contractor and <br> Tree O fficer (if appropriate) to discuss: <br> 1. Details of the Arboricultural Method Statement, Identify <br> conflicts and work towards a resolution. <br> 2. Identify the locations and specification of tree prc <br> barrie. |
| :--- | :--- | :--- |
| 2 | Undertake the tree work | Details of any clarifications or modifications are to be recorded : <br> circulated to all parties in writing. |
| 3 | Install tree protection. | Install the tree protection barrier in the locations shown on the T <br> Protection Plan. The project Arboriculturist is to undertake a site vis <br> to ensure they are positioned in the correct location and specification. |
| 4 | Commence with construction <br> work. | Post completion site meeting. Meeting on site with the project arboriculturist, site manager and LP <br> Tree Officer (if appropriate) to confirm there is no risk of <br> construction activities that may be damaging to the tree's RPA. <br> $\mathbf{5}$ Remove the tree protection <br> barriers. <br> 7 Undertake the replacement <br> tree planting.Must be completed within the first planting season (October to March) <br> following completion of the development. |

### 7.0 Disclaimers

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| Tree/ Group Ref. No. | Tree Species | Tree Ht . (m) | Stem Diameter <br> @1.5m (mm) | RPA Radius (m) | RPA <br> Area <br> (m2) | Branch Spread |  |  |  | Life Stage | Crown Height (m) | Phys. Condition | Condition, Observations and Defects | Preliminary Management Recommendations | Ret. <br> Span | Cat. Grade |
|  |  |  |  |  |  | N | E | S | W |  |  |  |  |  |  |  |
| $\begin{gathered} \text { T5 } \\ \text { (tag } \\ \text { no. } \\ 1154) \end{gathered}$ | Ash (Fraxinus excelsior) | 18 | 482 | 6 | 113 | 9 | 9 | 9 | 9 | Mature | 5 | Poor | The tree has advanced symptoms of ash dieback (Hymenoscyphus fraxineus), with dieback of branches and epicormic growth within the tree's crown. There are dead branches ( 5 cm in diameter) posing a low risk as the area below is not frequently used. The tree's crown is weighted towards the west. An area of dead bark/decay is evident on the east side of a branch at 1.5 m height, albeit the branch's weight has been reduced in the past to lower the probability of failure. | Remove the tree to facilitate the development. | 10+ | C1 |
| $\begin{gathered} \text { T6 } \\ \text { (tag } \\ \text { no. } \\ 1155 \text { ) } \end{gathered}$ | Ash (Fraxinus excelsior) | 12 | 420* | 5.1 | 81 | 1 | 4 | 4 | 1 | Mature | 7 | Poor | Ivy on the tree's stem prevented an accurate measurement. The trees crown is heavily biased towards the south-east. The tree has advanced symptoms of ash dieback (Hymenoscyphus fraxineus), with dieback of branches and lack of buds evident. At the base of the stem on the east and north sides there are areas of decay, plus decay from an old branch wound on the north-west side (at 10 cm height) is likely to have coalesced. | Remove the tree for safety reasons. | <10 | U |
| T7 | Scots pine (Pinus sylvestris) | 16 | 320* | 3.9 | 48 | 4 | 4 | 3 | 4 | Earlymature | 4 | Reduced | Off-site tree which appears to be generally in a good structural condition, however, a slight sparseness of needles is evident. | No action required at time of survey. | 40+ | B1 |
| T8 <br> (tag <br> no. <br> 1156) | Ash (Fraxinus excelsior) | 15 | 440 | 5.4 | 92 | 5 | 7 | 7 | 8 | Mature | 7 | Poor | Very large wound at the base of the north side of the tree's stem where the tree has lost a codominant leader in the past - decay appears to have spread into the base of the tree. The tree has advanced symptoms of ash dieback (Hymenoscyphus fraxineus), with dieback of branches and lack of buds evident. Dead branches ( $5 \mathrm{~cm}-10 \mathrm{~cm}$ in diameter) are over hanging the proposed driveway. | Remove the tree for safety reasons. | <10 | U |


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| Tree/ Group Ref. No. | Tree Species | Tree Ht . (m) | Stem Diameter @1.5m (mm) | RPA Radius (m) | RPA Area (m2) | Branch Spread |  |  |  | $\begin{aligned} & \text { Life } \\ & \text { Stage } \end{aligned}$ | Crown Height (m) | Phys. Condition | Condition, Observations and Defects | Preliminary Management Recommendations | Ret. Span | Cat. Grade |
|  |  |  |  |  |  | N | E | S | W |  |  |  |  |  |  |  |
| T9 | Ash (Fraxinus excelsior) | 12.5 | 381 | 4.5 | 64 | 3 | 0.5 | 3 | 3 | Earlymature | 6 | Poor | Ivy is covering the stem of the tree. The tree has advanced symptoms of ash dieback (Hymenoscyphus fraxineus), with dieback of branches and lack of buds evident. The tree is also suffering from canker on branches in its crown. | No action required at time of survey. | 10+ | C1 |
| T10 | Ash (Fraxinus excelsior) | 14 | Stem 1: 244 Stem 2: 354 (combined diameter: 430) | 5.1 | 81 | 3 | 2 | 10 | 2 | Earlymature | 4 | Normal | The tree has two stems which join at 0.5 m height. The tree has lost a large branch from 3 m height in the past and the remaining portion of the south side of the tree has a long split running down the stem and is liable to failure. | Remove the tree for safety reasons. | 10+ | U |
| T11 | Ash (Fraxinus excelsior) | 15 | Stem 1: 179 Stem 2: 315 (combined diameter: 362) | 4.2 | 55 | 2 | 8 | 8 | 2 | Earlymature | 8 | Normal | The tree has two stems which join at 0.3 m height. The crown is imbalanced due to competition with other trees in the group. No other significant observations were apparent at the time of the inspection. | No action required at time of survey. | $20+$ | C1 |
| T12 | Hawthorn (Crataegus monogyna) | 6.5 | 235 | 2.7 | 23 | 3 | 5 | 4 | 3 | Mature | 1.5 | Normal | Untidy specimen due to lots of dead ivy within its crown. The tree's stem leans towards the south-east. The tree is located within the proposed building footprint and will need to be removed. | Remove the tree to facilitate the development. | 40+ | C1 |
| T13 | Ash (Fraxinus excelsior) | 17 | 433 | 5.1 | 81 | 4 | 3 | 7 | 8 | Earlymature | 2.5 | Reduced | The tree's crown is imbalanced due to competition with other trees in the group. There is a storm damaged branch hanging at 8 m height to the south-west side. The tree is located within the proposed building footprint and will need to be removed. | Remove the tree to facilitate the development. | 20+ | B1 |



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| Tree/ Group Ref. No. | Tree Species | Tree Ht . (m) | Stem Diameter @1.5m (mm) | RPA Radius (m) | RPA Area (m2) | Branch Spread |  |  |  | Life <br> Stage | Crown <br> Height <br> (m) | Phys. Condition | Condition, Observations and Defects | Preliminary Management Recommendations | Ret. Span | Cat. Grade |
|  |  |  |  |  |  | N | E | S | W |  |  |  |  |  |  |  |
| G3 | Mixed species: pear, apple, sycamore, western red cedar, field maple, hazel, leyland cypress, hawthorn, horse chestnut. | 7 | 250* | 3 | 28 | 2 | 2 | 2 | 2 | Semimature to mature | 1 | Normal | Collection of trees (mainly native species), with some stumps of trees that have been removed recently and two small apple trees to the middle of the plot that have been heavily pruned. The two apple trees are located within the footprint of plot 1 and 2 , however, they can easily be relocated to another area of the site without a significant impact. No other significant observations were apparent at the time of the inspection. | Re-locate two small apple trees to the area designated for planting to the centre of the site. | 40+ | C1 |
| G4 | Mixed species: ash, blackthorn, hazel, hawthorn, sycamore, dogwood. | 7 | 200* | 2.4 | 18 | 1 | 1 | 1 | 1 | Semimature to earlymature | 0 | Normal | Narrow hedgerow of native species located in the adjacent property. The group has a good ecological and screening function. No defects were observed at the time of the survey. | No action required at time of survey. | 40+ | B1 |
| G5 | Mixed species: ash, hawthorn, hazel, field maple, oak. | 16 | 350* | 4.2 | 55 | 6 | 6 | 6 | 6 | Semimature to mature | 3 | Normal to reduced | Small copse of trees, predominantly mature ash species, that mark the boundary to the plot. Most of the ash have symptoms of ash dieback (Hymenoscyphus fraxineus), but generally symptoms are not too advanced. Some dead and hanging branches are contained within the tree crowns', but nothing which poses an immediate risk to the site in its current form. Some of the tree crowns extend into the proposed development site and will require protecting against damage from machinery and vehicles. | No action required at time of survey. | 40+ | B1 |

## Appendix 2 - Explanatory Key

- Estimated Dimensions:

Dimensions that have been estimated (e.g. for off-site or other inaccessible trees) are suffixed with a '\# symbol.

- Tree/G roup Reference Number:

S equential reference number for each individual tree, or group of trees, which corresponds with the tree survey plan. Corresponding number tags have been placed as high as convenient on the stem of each tree.

- Groups of trees and woodlands:

Trees growing as obvious groups or woodlands will be assessed as such (where considered appropriate). However, an assessment of individuals within the group (or woodland) will be undertaken if there is a need to differentiate between them (e.g. in order to highlight a significant variation in attributes).

- Tree Species:

Listed by common and scientific name.

- Tree Height:

Measured to the nearest half metre for dimensions up to 10 m , and the nearest whole metre for dimensions over 10 m .

- Stem Diameter:

Recorded in millimetres. Measurements are taken at 1.5 m above ground level, at the highest point on sloping ground. For trees with low branches or swellings on the stem, measurements will be taken at the narrowest point below the fork/swelling. Variations of the measurement height are recorded with an ' $x$ ' (e.g. $x=40 \mathrm{~cm}$ ).

- Multi-stemmed trees

The combined stem diameter of multi-stemmed trees is calculated as follows;

1. Trees with two to five stems: $\sqrt{ }(\text { stem diameter } 1)^{2}+(\text { stem diameter } 2)^{2}+(\text { stem diameter } 3)^{2}+$ $(\text { stem diameter } 4)^{2}+(\text { stem diameter } 5)^{2}$
2. Trees with more than five stems: $\sqrt{ }(\text { mean stem diameter })^{2} x$ number of stems

- R oot Protection Area (RPA)

The RPA is calculated as an area equivalent to a circle radius 12 times the stem diameter, and is determined using Table D.1, from Annex D of BS5837:2012. The calculated RPA for each tree is capped to $707 \mathrm{~m}^{2}$.

- Branch Spread:

Taken at the four cardinal points do derive an accurate representation of the tree crown. Measurements are estimated to the nearest half metre for dimensions up to 10 m , and the nearest whole metre for dimensions over 10 m .

## - Life Stage:

1. Young $(Y)=$ Saplings and young trees under 20 years of age.
2. Semi Mature $(S M)=$ Trees older than 20 years but less than a third of the life expectancy for the species (normally making substantial extension growth).
3. Early Mature (EM) = Trees between a third and two thirds of their life expectancy for the species (normally making good extension growth).
4. Mature $(M)=$ Trees beyond two thirds of their life expectancy for the species (typically low rate of significant extension growth).
5. O ver Mature $(O M)=$ Trees beyond two thirds of their life expectancy for the species, with the crown starting to break up and decrease in size.

## - Canopy height:

Estimated dimension to inform on ground clearance, crown/stem ratio and scaling. Measurements are to the nearest half metre for dimensions up to 10 m , and the nearest whole metre for dimensions over 10 m .

- Physiological Condition:

An assessment of the general vitality of the tree using visual assessment of extension growth, crown transparency, and branch architecture, then comparing with what is considered normal for that species. Grading codes used are:

1. $\mathrm{N}=$ within the normal range for the species.
2. $R=$ reduced for the species and age.
3. $P=$ poor.
4. $\mathrm{D}=$ dead.

- Condition, Observations and Defects.

General, visual, observations, particularly regarding the tree's structural condition (i.e. the presence of any decay and structural defects). Any trees with defects that present an immediate risk, or, are affected by a pest or pathogen which could cause widespread and serious damage unless controlled or eradicated, will be promptly brought to the attention of the relevant person.

- Preliminary Management Recommendations.

Recommendations for work required to the trees in their current context. This may include further investigations of defects that have been identified, i.e. climbing inspections, specialist decay mapping, or laboratory analysis of plant and soil samples.

- Retention Span:

The estimate remaining contribution (in years) the trees are expected to reasonably provide. The grading is as follows:

1. Can not realistically be retained for longer than 10 years $(<10)$.
2. Estimated remaining expectancy of at least 10 years ( $10+$ ).
3. Estimated remaining expectancy of at least 20 years ( $20+$ ).
4. Estimated remaining expectancy of at least 40 years ( $40+$ ).

- Categorisation Grade:

Categorisation to identify the quality and value (in a non-fiscal sense) of the tree, group or woodland, to assist informed decision making concerning which trees should be retained or removed in the event of development occurring. For a tree to qualify under any given category, it should fall within the scope of that category's definition ( $U, A, B, C$ ) as follows:

1. Category U - Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than10 years.
2. Category A - Trees of high quality with an estimated remaining life expectancy of at least 40 years
3. Category $B$ - Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.
4. 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 .
In addition, trees in categories $A$ to $C$, should qualify under one or more of the three subcategories (1, 2, 3). Subcategories 1,2 and 3 are intended to reflect arboricultural and landscape qualities, and cultural values, respectively. Further details can be found in Table 1 in BS 5837:2012.

## Appendix 3 - Qualifications and Experience of Alex Peacock

## Qualifications and Training

- SEG Awards ABC Level 6 Diploma in Arboriculture
- Registered User of QTRA (no. 7183)
- Lantra Awards Professional Tree Inspection
- ABC Level 3 Technicians Certificate in Arboriculture (the current equivalent of ABC Level 4 Diplorr Arboriculture)


## Memberships

Professional Member of the Arboricultural Association

## Experience

I have worked in the arboricultural industry continuously since 1999, developing my previous company, Peacock Tree Ecology, to achieve the highly coveted Arboricultural Association Approved Contractor accreditation.

This helped me to develop a robust underlying practical knowledge of trees. As well as managing all business activities, such as health and safety, biosecurity, training and administration, I ran several treesurgery teams.

More significantly, I regularly advised customers on tree management - a service that included tree consultancy and producing professional arboricultural reports.

In 2017 I decided to build on my experience and focus exclusively on arboricultural consultancy and gained a Level 6 Diploma in Arboriculture at the National Arboretum in Westonbirt.

Since qualifying I have worked closely with a wide range of professionals from property development \& construction companies and local authorities to estate managers and large-property owners - as well as other arboriculturists and contractors - to solve problems and give specialist advice.

# Tree Protection Plans 



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