

# M25 junction 10/A3 Wisley interchange TR010030

## 6.5 Environmental Statement: Appendix 7.3 Veteran trees and Arboricultural Impact Assessment

Regulation 5(2)(a)  
Planning Act 2008

Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009



## Infrastructure Planning

### Planning Act 2008

#### The Infrastructure Planning (Applications: Prescribed Forms and Procedure) Regulations 2009 (as amended)

### M25 junction 10/A3 Wisley interchange

#### The M25 junction 10/A3 Wisley interchange Development Consent Order 202[x ]

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### 6.5 ENVIRONMENTAL STATEMENT

#### APPENDIX 7.3 VETERAN TREES AND ARBORICULTURAL IMPACT ASSESSMENT

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# **Appendix 7.3 Veteran trees and Arboricultural Impact Assessment**

## 7.1 Introduction

### 7.1.1 Scope of assessment

- 7.1.1.1 Atkins Limited (Atkins) has been commissioned by Highways England to undertake a tree survey in support of an Environmental Impact Assessment (EIA) and Environmental Statement for the proposed M25 junction 10/A3 Wisley interchange (the 'Scheme'). The Scheme will be a Nationally Significant Infrastructure Project (NSIP). This means that a Development Consent Order (DCO) application is to be made to the Secretary of State under Section 37 of the Planning Act 2008 to seek authorisation to build the Scheme.
- 7.1.1.2 This report is an arboricultural impact assessment (AIA) that determines the impact of the scheme on the recorded trees. The tree survey also identified veteran trees, this included those trees which can be considered as ancient. As defined in the National Planning Policy Framework (NPPF) 2018, an ancient or veteran tree is "*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 ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage*".
- 7.1.1.3 In addition to veteran trees, further trees were recorded that are in sensitive locations or those that have saproxylic habitat features, that required further assessment by an experienced entomologist to confirm the suitability or quality of such habitats for saproxylic invertebrates. Such trees were recorded in order to inform the design process and retain the trees where feasible, or to enable mitigation measures to be identified for the treatment of these trees if they require removal.
- 7.1.1.4 This report details the trees recorded within the DCO Boundary and those on or adjacent to this line. It includes trees within Painshill Park, RHS Wisley and other sensitive areas, or trees covered by Tree Preservation Orders (TPO) that could be impacted upon by the Scheme. These trees are in the majority of cases not veteran trees but included to determine the impacts of the Scheme to inform the DCO application and gain necessary consents where applicable.
- 7.1.1.5 This report also details woodland compartments within Surrey Wildlife Trust (SWT) land, where the impacts of the Scheme will require tree loss and infringement into existing woodlands.
- 7.1.1.6 The report forms an Appendix to the Ecology Chapter of the ES.
- 7.1.1.7 The trees and woodlands have been recorded in accordance with the British Standard *BS5837:2012 'Trees in Relation to Design, Demolition and Construction – Recommendations'* to report on the impacts of the proposed works. It is a scheme-wide report and is supplemented by the production of Tree Protection Plans (TPPs), which are included within Appendix C of this report.

The proposed Scheme covers works around the M25 junction 10/A3 Wisley interchange. Its extents are illustrated on the TPPs.

## 7.1.2 Statutory Protection

- 7.1.2.1 Trees may be protected through a Tree Preservation Order (TPO). The law on TPOs is in Part VIII of the Town and Country Planning Act 1990, as amended, and in the Town and Country Planning (Tree Preservation) (England) Regulations 2012.
- 7.1.2.2 A TPO is made by a local planning authority in respect of a tree(s) as the tree is considered to bring amenity value to the surrounding area. A TPO makes it an offence to cut down, uproot, lop, top, wilfully damage or wilfully destroy a protected tree without authorisation. Works permitted by an Act of Parliament are exempt from these regulations.
- 7.1.2.3 The TPOs within the Scheme boundary are defined on the TPPs through a green dot or green dashed outline. They correspond to the following trees:
- G035 – Painshill Park, south west of Gothic Tower;
  - G41A-H – Painshill Park, south west of Gothic Tower;
  - T156 – adjacent to service road running parallel to A3 on-slip at A3/A245 Painshill junction; and
  - T157 – adjacent to service road running parallel to A3 on-slip at A3/A245 Painshill junction.

## 7.1.3 Definition of Veteran Trees and Planning policy

- 7.1.3.1 The National Planning Policy Framework (NPPF) was updated in July 2018 to provide greater protection for veteran trees (and subsequently updated so the latest published version is 2019). The pertinent section being paragraph 175 c) which states:
- “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 and a suitable compensation strategy exists”.*
- 7.1.3.2 Footnote 58 from the same section of the NPPF references applicable exceptional reasons as being:
- “for example, 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”.*
- 7.1.3.3 The NPPF identifies ancient/veteran trees as:
- “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 ancient but are old relative to other trees of the same species. Very few trees of any species reach the ancient life-stage”.*
- 7.1.3.4 In relation to NSIPs, within the National Policy Statement for National Networks, paragraph 5.32 states:
- “The Secretary of State should not grant development consent for any development that would result in the loss or deterioration of irreplaceable habitats including ancient woodland and the loss of aged or veteran trees found*

*outside ancient woodland, unless the national need for and benefits of the development, in that location, clearly outweigh the loss. Aged or veteran trees found outside ancient woodland are also particularly valuable for biodiversity and their loss should be avoided. Where such trees would be affected by development proposals, the applicant should set out proposals for their conservation or, where their loss is unavoidable, the reasons for this.” This has a footnote stating, “This does not prevent the loss of such trees where the decision-maker is satisfied that their loss is unavoidable”.*

7.1.3.5 Further guidance on the classification of ancient and veteran trees was obtained from a number of sources.

7.1.3.6 The Forestry Commission and Natural England guidance<sup>1</sup> describes ancient and veteran trees as follows:

**“Ancient trees**

*An ancient tree is exceptionally valuable. Attributes can include its:*

- *great age*
- *size*
- *condition*
- *biodiversity value as a result of significant wood decay and the habitat created from the ageing process*
- *cultural and heritage value*

*Very few trees of any species become ancient.*

**Veteran trees**

*All ancient trees are veteran trees, but not all veteran trees are ancient. A veteran tree may not be very old, but it has decay features, such as branch death and hollowing. These features contribute to its biodiversity, cultural and heritage value”.*

7.1.3.7 The Ancient Tree Guide No.4<sup>2</sup>, defines an ancient tree as one “*that has passed beyond maturity and is old, or aged, in comparison with other trees of the same species*”.

7.1.3.8 The Ancient Tree Hunt<sup>3</sup> defines an ancient tree as having all or some of the following characteristics: 1. Biological, aesthetic or cultural interest, because of its great age; 2. A growth stage that is described as ancient or post-mature; 3. A chronological age that is old relative to others of the same species.

7.1.3.9 It is during the ancient stages of the life of a tree that conditions are favourable for progressive colonisation by fungi that can change “*the nature and condition of wood material and dead dysfunctional woody tissue accumulate*”<sup>4</sup>. It is also during this time of advanced age that the continued natural damage and

<sup>1</sup> Forestry Commission and Natural England (2018). Guidance. Ancient woodland, ancient trees and veteran trees: protecting them from development. <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>. Accessed: 12/06/2019

<sup>2</sup> ATF (2008). Ancient Tree Guide No. 4: What are ancient, veteran and other trees of special interest? Ancient Tree Forum, c/o The Woodland Trust, Grantham, UK, 7 pp. Available at: <http://www.ancienttreeforum.co.uk/wp-content/uploads/2015/02/ancient-tree-guide-4-definitions.pdf>

<sup>3</sup> Owen, K. & Alderman, D. (2008). Ancient Tree Hunt: The minimum girth of ancient trees – a guide for verifiers. Ancient Tree Hunt (Ancient Tree Forum, Woodland Trust, Tree Register of the British Isles), 30 pp.

<sup>4</sup> Neville Fay's 'Defining and surveying veteran and ancient trees', March 2007.

progression of wood decay fungi that attributes to the formation of ‘veteran features’<sup>3</sup>. These features being trunk hollowing, branch cavities, live stubs, shattered branch ends, loose bark, sap runs and a range of rot types<sup>3</sup>.

- 7.1.3.10 The features provide a range of unique deadwood habitat specific to a range of invertebrates including saproxylic invertebrates. This will include specific wood decay, i.e. different types of rot, which will provide niche habitat for invertebrates. The perpetuation of such habitat enables resilience and sustainability in the population development of such specialised and rare invertebrates, particularly in view of their limited mobility.
- 7.1.3.11 The term veteran “*describes qualities associated with particular habitats in trees, principally associated with dead wood*”<sup>3</sup>. So, a veteran tree is also one that “***mimics the quality and quantity***”<sup>3</sup> of associated veteran features that are typically found on an ancient tree. The features need to exhibit or allow for a diversity of wood decay. It is also recognised that the longer these features are in-situ the greater the diversity of colonising species.

## 7.2 Survey

### 7.2.1 General

- 7.2.1.1 The tree survey works have been undertaken by qualified and experienced arboriculturists. An experienced entomologist also assisted in the classification of veteran trees.
- 7.2.1.2 The approach to the survey involved ground level walked assessments to record and confirm the presence of veteran trees, and to record additional trees in line with the scope of the assessment including the different woodland compartments within SWT land.
- 7.2.1.3 Potential veteran specimens and a sample of the standing dead trees recorded were then re-surveyed by an experienced entomologist to ascertain their value for saproxylic invertebrates<sup>5</sup>. This additional survey effort was focused on determining whether the trees provided exceptional value for saproxylic invertebrates, which is a key consideration for assessing the biodiversity value of a veteran/ancient tree<sup>6</sup> or trees offering veteran habitat features.
- 7.2.1.4 The locations of individual trees and the start and end points of groups/woodlands were, where possible, plotted using proprietary GIS data capture software on Trimble hand-held mobile mappers. These locations were verified using available aerial imagery.
- 7.2.1.5 This report has been undertaken in accordance with the British Standard ‘BS5837:2012 Trees in Relation to Design, Demolition and Construction – Recommendations’, and supplemented by Natural England’s ‘Veteran Trees Initiative: Specialist Survey Method’ and Neville Fay’s ‘Defining and surveying veteran and ancient trees’ (Fay, 2007), to assist in the identification of veteran trees.

<sup>5</sup> ‘Saproxylic’ invertebrates are dependent on microhabitats associated with the processes of decay and damage in the bark and wood of trees.

<sup>6</sup> The NPPF identifies ancient or veteran trees as; ‘a tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value.’



- 7.2.1.6 BS5837:2012 gives recommendations and guidance on the relationship between trees and the design, demolition and construction process, setting out the principles and procedures to be applied to achieve a harmonious and sustainable relationship between trees and structures.
- 7.2.1.7 BS5837:2012 does not set explicit parameters for measuring the sensitivity of an arboricultural resource; nor does it assess the magnitude of impact of a proposed development on trees (other than by providing a record of the number of trees that would need to be removed to facilitate the development). Rather, the British Standard provides parameters which enable the arboriculturist to assess the quality of the trees that may be affected by the development that is proposed.
- 7.2.1.8 Whilst the British Standard categories are open to varied interpretation, the guidelines in the cascade chart of BS5837:2012 (see insert A.1 in Appendix A of this AIA) provide details on how to determine tree qualities and can be used to inform the design process to retain those trees of higher quality where possible.
- 7.2.1.9 BS5837:2012 states that where veteran trees are recorded and if ancient or entering the ancient age classification, these trees will almost always be included in the highest category of A3.

## 7.2.2 Spatial scope

- 7.2.2.1 The survey has targeted trees within and around the DCO Boundary. The woodland survey has been limited to SWT land, given this is area is the main location for the woodland infringement.
- 7.2.2.2 The TPPs (see Appendix C of this report) show trees that have been surveyed.
- 7.2.2.3 This report is targeted at the impacts on veteran trees, and those trees recorded as part of the scope of this assessment. It does not cover the subsequent impacts such tree removal would have on ecological or landscape receptors, or those trees that were not recorded as part of this assessment.

## 7.2.3 Data gathering

- 7.2.3.1 Data have been collected in accordance with *BS5837:2012*, as outlined in Appendix A of this report. The purpose of the tree categorisation method applied by the arboriculturist is to identify the quality and value (in a non-fiscal sense) of the recorded tree stock, allowing informed decisions to be made concerning which trees should be removed and which retained if development is to occur.
- 7.2.3.2 For a tree to qualify under any given category, it should fall within the scope of that category's definition as defined in Appendix A of this report (categories U, A, B, C) and, for trees in categories A to C, it 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.
- 7.2.3.3 Veteran trees are specifically noted in A3 category on the cascade chart. This has been applied to this survey. However, where the trees are not ancient the number of veteran habitat features, estimated remaining life expectancy and safety issues were considered in the assigning of tree categories.
- 7.2.3.4 Trees were recorded as individual specimens, groups and woodlands. Where trees were recorded as groups or woodlands measurements were taken from the

largest tree within the group/woodland. The method of measuring diameters is defined in Appendix A of this report.

- 7.2.3.5 This level of survey meets the requirements of BS5837:2012, which states that “trees growing as groups or woodland should be identified and assessed as such”. The standard defines the term group as “trees that form cohesive arboricultural features either aerodynamically (e.g. trees that provide companion shelter), visually (e.g. avenues or screens) or culturally including for biodiversity (e.g. parkland or wood pasture)”.
- 7.2.3.6 Crown spreads of the surveyed trees were given as an average measurement where the tree’s crowns were balanced. Where there was a notable difference in crown spread to a cardinal point, these were recorded. The average measurement was taken from the cardinal point relevant to the direction of the Scheme. This level of survey is deemed sufficient by the arboriculturist to establish the extent of the crown spread in the direction of any future proposals. All crown spread measurements should be taken from the tree survey schedules (see Appendix B of this report).
- 7.2.3.7 The trees were assessed in line with the Visual Tree Assessment (VTA) method developed by Mattheck and Breloer (1994). This method is based on the axiom of uniform stress, whereby a tree will grow in response to environmental stimuli to produce a structure that bears forces evenly across its surface. As such an internal defect, such as decay, would initiate a noticeable change in the stem’s shape to accommodate the physical change.
- 7.2.3.8 The trees were also assessed using Neville Fay’s ‘Defining and surveying veteran and ancient trees’ (Fay, 2007), to assist in the identification and classification of veteran trees which are ancient specimens. The relevant section of the table on tree girth has been reproduced in table 7.1. The different veteran habitat features present on each tree were also recorded and noted in the survey schedules.

**Table 7.1: Girth sizes to classify ancient trees**

Age Class	Tree Stem Size		
	>2.5m stem girth >795mm stem diameter	>4.0m stem girth >1273mm stem diameter	>4.5m stem girth >1432mm stem diameter
Ancient	Field maple Rowan Yew Birch Holly and other smaller trees	Oaks Ash Scots Pine Alder	Sycamore Lime Horse chestnut Sweet chestnut Elm species Poplar species Beech Willows Other pines and exotics

Insert Source: information taken from Table 1 of Neville Fay’s ‘Defining and surveying veteran and ancient trees’, March 2007.

## 7.2.4 Limitations to survey

- 7.2.4.1 Where access was restricted due to safety concerns or third-party refusal, then these areas were not assessed.
- 7.2.4.2 The survey was not a full BS5837:2012 survey of all trees within the DCO boundary, it was a targeted approach to specific areas and the recording of veteran specimens or significant specimens as per our instructions.
- 7.2.4.3 Where access permitted, trees were identified and inspected from ground level only and were not climbed. No invasive examination techniques (such as increment boring, or internal decay detection) were carried out and as such no assessment of the internal condition of the wood of these trees can be given.
- 7.2.4.4 The tree survey undertaken is not intended to be a tree risk management survey targeting safety-related issues. However, as veteran tree features often have defects that pose a safety risk, any management recommendations that have been recorded are related to reducing the risk of harm to people or property where deemed appropriate by the arboriculturist. These are detailed within the tree survey schedules (see Appendix B of this report).
- 7.2.4.5 The application of veteran tree status, where it is not ancient or meeting criteria of advanced age as per available guidance, required assessment from a range of specialists to verify its veteran status. Where the tree is not classified as ancient, then the level to which the habitat features provide suitable saproxylic habitat for invertebrates, mimicking ancient trees, required detailed specialist assessment. It is only after such detailed assessment that the tree can be determined as to whether it provides habitat characteristics of sufficient quality and quantity to classify its status further as veteran. If it does not meet these criteria, then the tree was not classified as a veteran. Further considerations around the cultural and heritage value of the trees were also considered in the classification of veteran trees.
- 7.2.4.6 Validity, accuracy and findings of the tree locations will relate directly to the accuracy of the available aerial imagery and the GIS data capture software being used. As such the accuracy of the tree locations is potentially open to discrepancies and their locations may need verifying. Where tree groups have been illustrated as an outline this covers the extents of the tree group. It does not always illustrate individual trees within the groups. Where individual trees were identified they were plotted separately.
- 7.2.4.7 The report does not comment on possible effects of trees on neighbouring properties, including in relation to subsidence or heave, or with regard to possible hazards presented by trees surveyed.
- 7.2.4.8 Trees are living organisms subject to changes outside human control. Trees and their environment alter with the seasons and it is as well to inspect trees whilst in full leaf and when out of leaf. Following harsh or unexpected weather conditions, or heavy storms it is also prudent to inspect trees. Changes to ground water conditions will affect the root growth of a tree. Such changes are not always the result of human influence and other factors may be involved.

## 7.3 Survey results

### 7.3.1 Veteran trees

- 7.3.1.1 All of the trees recorded during the surveys are detailed in sub appendix B of this report.
- 7.3.1.2 From the trees recorded, **41no.** individual trees qualify as veteran specimens, and **2no.** groups. These are referenced as 'Vet' within the life stage classification column of the survey schedule, and their reference numbers have a red box around them on the TPPs.
- 7.3.1.3 The main species recorded that were classified as veteran status was common oak. These being sporadically located within the Scheme boundary, with a concentration being within the land to the north-west of the junction specifically around Fox Warren Park and Feltonfleet School. These trees being of high aesthetic appeal given their large scales and visibility in the landscape. In terms of their heritage value they are all growing within historically treed landscapes, and details on historic land use and further heritage aspects are covered within chapters 9 and 11 of the ES. No specific reference to a specific historic person or event could be identified for any specific veteran tree during the assessment.
- 7.3.1.4 The preservation of these veteran trees should be seen as paramount during the development of the Scheme, especially as the majority of these trees were also in good vitality at the time of the survey.

### 7.3.2 Additional trees/woodland compartments

- 7.3.2.1 The remaining trees that were recorded include standing dead specimens, whose value is in the dead wood habitat they provide to the locality, important trees due to their protection status, and trees adjacent or within sensitive land areas, i.e. RHS Wisley and Painshill Park. These being recorded to inform the continued design of the Scheme, and to reduce impacts where possible.
- 7.3.2.2 The standing dead trees or those in significant decline were recorded to permit assessment by an experienced entomologist to ascertain their value for saproxylic invertebrates and to determine suitable mitigation measures for the removal or replacement of such habitat, also whether the trees could be classified as veteran specimens. The ability to retain dead trees or those trees with significant structural defects within falling distance of a road is limited through health and safety considerations, so the approach to their retention or management is to manage to the risk of harm to adjacent people or property, whilst still enabling their retention in some form either on the ground or as reduced specimens.
- 7.3.2.3 Whilst veteran tree characteristics provide habitat features, these features can often be at the expense of structural integrity of the tree as a whole, or the defective part(s). Under both the civil law and criminal law, those duty holders (the person(s) who have control of tree management along the A3 and M25 highway corridor) have responsibilities for the health and safety of those on the highway network and therefore have potential liabilities arising from the falling of a tree or branch in the tort of negligence or criminal prosecution. This duty of care is laid down in the Occupiers Liability Acts 1957 & 1984, the Highways Act 1980 (especially section 41(1) and Health & Safety at Work Act 1974. Hence, as

part of routine hazardous tree management, it is likely that some of the recorded trees would require works to reduce the risk of parts of or whole tree failure. The landowner/manager has a duty of care to ensure that the trees are managed to reduce the risk of harm or damage that the trees may present to people or property.

- 7.3.2.4 The survey recorded a range of different woodland compartments, these being identified through visible changes in species composition, density and structural diversity. These are listed in the survey schedule, and illustrated on the 'Vegetation removal plans' in figure 9.8 of the ES.
- 7.3.2.5 At the time of the survey a number of the compartments had received thinning operations, notably in SWT land. The arisings from these operations had in the main been processed, although, to the north east of the junction a large proportion of the arisings were felled and left in situ.

## 7.4 Arboricultural impacts

### 7.4.1 General

- 7.4.1.1 This report determines the impact of the Scheme on the recorded tree stock. It provides details on the recorded trees including their condition and in some cases suitability for retention.
- 7.4.1.2 The report is supplemented by the TPPs (Appendix C of this AIA) that illustrate the proposed Scheme, the DCO boundary, the recorded trees and trees that would require removal or potential removal to facilitate the Scheme.
- 7.4.1.3 The drawings cover the outline of the Scheme. This means a 'worst-case scenario' is currently having to be presented in terms of tree removals or potential removals, as, during further progression of the design, bespoke engineering options could be explored to retain trees where possible and in consultation with the arboriculturist. However, in view of the scale of the proposed earthworks, the ability to retain trees safely will be a significant challenge, and one which may not be possible in a lot of cases. Confirmation on tree removals will be undertaken prior to construction and detailed within an Arboricultural Method Statements (AMS), that shall also confirm protection measures for the retained trees.
- 7.4.1.4 Similarly, any trees which have not been previously surveyed (or areas where design changes occur during detailed design) will be assessed following the methodology detailed in BS5837:2012 and this information will feed into the AMS.
- 7.4.1.5 The tree survey schedules within Appendix B of this AIA cover all the trees recorded as part of this assessment in line with the BS5837:2012 guidance. A column has been included to indicate the impact of the works.
- 7.4.1.6 Entries in the impact column include removal (abbreviated as REM and highlighted as red); potential removal (abbreviated as POT REM and highlighted as blue) (to be confirmed prior to construction); part removal (abbreviated as PRG and highlighted as orange); and retained (abbreviated as RET and highlighted as green). Where the trees fall outside the Scheme Boundary, the default entry is retained.

## 7.4.2 Root protection areas

- 7.4.2.1 The root protection area (RPA), as defined in the BS5837:2012, is the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority. This area should be protected from disturbance "in order to avoid unacceptable damage to the tree as a result of severance or asphyxiation of the root system."
- 7.4.2.2 The recommended minimum area (m<sup>2</sup>) to avoid potentially harmful disturbance has been calculated and entered into the tree schedules (see Appendix B of this AIA) for all trees. The RPA for each individual tree has been illustrated on the TPPs as a circle centred on the tree's stem, while the RPAs of the tree groups and woodlands have not been illustrated, unless trees have specifically been recorded within the groups.
- 7.4.2.3 This is largely due to the tree or woodland groups within the Scheme Boundary having to be removed in their entirety given the extensive earthworks proposed, meaning the provision of RPAs is unnecessary.
- 7.4.2.4 The use of RPAs will become more prevalent during the detailed design process: the infringement into these areas should be reduced where possible through sympathetic engineering approaches. The current TPPs are to be used to inform the continued progression of the scheme, similarly, the survey schedules which contain RPA details for the groups recorded.
- 7.4.2.5 In addition to the RPAs of trees where the veteran/ancient trees or significant specimens are impacted upon by the proposals then the actual root zones of the trees could be mapped using sonic-tomography to determine extent of any root loss that could occur, and to reduce or remove works in these locations. In all cases where the tree's RPAs extend into the DCO boundary, the land that the RPAs are extending into is generally either 'disturbed' or 'made' ground, meaning the soils contain less organic material, nutrients and likely to have less mycorrhizal fungi activity – so the preservation of these areas beyond that of root retention is less of a priority.
- 7.4.2.6 The significant specimens outside of the veteran/ancient trees could be those within the RHS Wisley grounds or within the Heyswood Girl Guides ancient woodland area.

## 7.4.3 Arboricultural impacts – veteran trees

- 7.4.3.1 The impacts of the work have been assessed, and table 7.2 covers the veteran trees that are currently directly impacted upon by the Scheme, further veteran trees are located beyond the direct footprint of the works within compensation land and areas of land previously within the DCO boundary of the Scheme, these are not included within the table below as these are to be retained.
- 7.4.3.2 Suggested mitigation options are set out in table 7.2, but these will be subject to further refinement in detailed design and follow the hierarchy of mitigation as highlighted within the ES.

**Table 7.2: Veteran trees potentially impacted by the Scheme**

Tree ID	Tree Species	Location	Summary of value	Potential impact	Suggested mitigation
T006	Sweet chestnut	Wisley Common, south of the M25 and west of the A3, adjacent to road	The tree has reached an ancient age class. Despite this it appears healthy and has no obvious dead wood features or significant value for saproxylic invertebrates.	<b>Removal.</b>	None possible. Tree should be felled at the base and the trunk/significant limbs should be left intact (or in large sections) within the woodland to rot and provide a dead wood source. Position in the same/or a similar aspect, ideally in a sunny location.
T017	Oak	South of M25, Clearmount Footbridge	The tree has reached an ancient age class. Standout specimen in row of trees at 8m spacings beside mud track; decay in western buttress area; 10% deadwood in crown; 200mm diameter hanging deadwood in southern crown; historically severed ivy; 12.5m to motorway fence. Recommendation: Arbortom investigation to determine scale of basal decay if tree is to remain.	<b>Removal.</b>	None possible. Tree should be felled at the base and the trunk/significant limbs should be left intact (or in large sections) within the woodland to rot and provide a dead wood source. Position in the same/or a similar aspect, ideally in a sunny location.
T085	Sweet chestnut	Adjacent to the Elm Lane	The tree has reached an ancient age class. Standard tree growing on historic earth mound. Formerly three stems from 2.5m, south stem failed, large diameter wound remaining. Central stem elongated wound to west side, potentially lightning strike scar. Hollow main stem. Dead wood in lower crown to south. Habitat holes on main stem.	Potential removal/impact Resurfacing of Elm Lane could impact tree roots.	Bespoke mitigation measures required to limit impact, e.g. no-dig construction approach.

Tree ID	Tree Species	Location	Summary of value	Potential impact	Suggested mitigation
T086	Common Oak	Adjacent to the Elm Lane.	The tree has reached an ancient age class. Twinstem tree adjacent to Elm Lane forking at 1500mm; crown suppression to north; frequent deadwood stubs not exceeding 100m diameter; neighbouring tree close to north, fusing at base.	Potential removal/impact Resurfacing of Elm Lane could impact tree roots.	Bespoke mitigation measures required to limit impact, e.g. no-dig construction approach.
T108	Oak	Adjacent to the A3, within Feltonfleet School.	The tree has reached an ancient age class. It has extensive dead wood and red rot is likely to be present (important for saproxylic invertebrates). This tree is part of a series of three adjacent trees (T106/107/108) with a range of size classes, and at varying stages of decay, forming a joint long-term resource for saproxylic invertebrates.	Potential removal/impact Approximately 50% of the RPA is within the DCO boundary. The tree is currently shown on design drawings as positioned at the edge of the A3 slip road embankments.	Undertake detailed design options to limit/avoid encroachment into RPA. Undertake root zone mapping using sonic-tomography to ascertain actual root spread of the tree, to inform the layout of the proposals and to retain identified roots. The requirements for arboricultural mitigation measures would need to be defined within an Arboricultural Method Statement.
T109	Common oak	Adjacent to the A3, within Feltonfleet School (south-west corner).	The tree has reached an ancient age class. Despite this it does not have extensive dead wood features or significant value for saproxylic invertebrates.	Potential removal/impact Approximately 50% of the RPA is within the DCO boundary. The tree is currently shown on design drawings as positioned at the edge of the A3 slip road embankments.	Undertake detailed design options to limit/avoid encroachment into RPA. Undertake root zone mapping using sonic-tomography to ascertain actual root spread of the tree, to inform the layout of the proposals and to retain identified roots. The requirements for arboricultural mitigation measures would need to be defined within an Arboricultural Method Statement.



Tree ID	Tree Species	Location	Summary of value	Potential impact	Suggested mitigation
T110	Common oak	Adjacent to the A3, within Feltonfleet School (south-west corner).	The tree has reached an ancient age class. It has extensive rot (5-10m <sup>2</sup> ) and dead wood features (red rot is likely in second stem) and it is in an open (sunlit) setting. All these factors increase its value for saproxylic invertebrates.	Potential removal/impact Approximately 50% of the RPA is within the DCO boundary. The tree is currently shown on design drawings as positioned at the edge of the A3 slip road embankments.	Undertake detailed design options to limit/avoid encroachment into RPA. Undertake root zone mapping using sonic-tomography to ascertain actual root spread of the tree, to inform the layout of the proposals and to retain identified roots. The requirements for arboricultural mitigation measures would need to be defined within an Arboricultural Method Statement.
T111	Common oak	Adjacent to the A245, within Feltonfleet School (north-west corner).	The tree has reached an ancient age class. Large stem circumference. Despite this it does not have extensive dead wood features or significant value for saproxylic invertebrates.	Potential removal/impact Approximately 50% of the RPA is within the DCO boundary. The tree is currently shown on design drawings as positioned at the edge of the new road off the A245.	Undertake detailed design options to limit/avoid encroachment into RPA. Undertake root zone mapping using sonic-tomography to ascertain actual root spread of the tree, to inform the layout of the proposals and to retain identified roots. The requirements for arboricultural mitigation measures would need to be defined within an Arboricultural method statement.
T130	Oak	South of the A3, close to the existing gas compound, located in the corner of pasture.	The tree has reached an ancient age class. There are extensive dead wood features, including crown die-back which suggests heartwood rot may be developing. It is located in an open (sunlit) setting in the corner of pasture. All these factors increase its value for saproxylic invertebrates.	Potential removal/impact A proposed balancing pond south of the A3 is positioned on top of the tree location.	Undertake detailed design options to limit/avoid encroachment into RPA. Undertake root zone mapping using sonic-tomography to ascertain actual root spread of the tree, to inform the layout of the proposals and to retain identified roots. The requirements for arboricultural mitigation measures would need to be defined within an Arboricultural method statement. The balancing pond could be designed to enable the retention of the tree on the edge of the pond embankments, preferably as a live specimen but if

Tree ID	Tree Species	Location	Summary of value	Potential impact	Suggested mitigation
					this is not possible then a retained monolith/habitat pole in this location would still provide a dead wood resource.
T148	Common oak	In the northern part of the Ockham Park junction construction compound, north of the A3.	The tree has reached an ancient age class. It has extensive dead wood features (important for saproxylic invertebrates).	Potential removal/impact The tree is located at the edge of a construction compound area.	Tree should be retained. Standard tree protection fencing should be sufficient to ensure construction vehicles or materials do not encroach within the RPA.
T165	Sweet Chestnut	Adjacent to track within Heyswood girl guide camp site, south of A3.	The tree is an ancient specimen. It is the largest specimen within the DCO boundary. It has extensive rot and dead wood and it is in an open (sunlit) setting. All these factors increase its value for saproxylic invertebrates.	Potential removal/impact The tree is adjacent to an access track leading to a construction compound south of the A3. Impacts could occur if the existing track is widened or re-surfaced.	Tree should be retained. Any works required to the tree (e.g. pruning/limb removal) or works within the RPA (e.g. re-surfacing) will need to be agreed with an arboricultural consultant and detailed in an arboricultural method statement.

7.4.3.3 The **2no. trees identified for removal** are directly within the footprint of the proposals and there are no feasible design changes available to retain the trees. The trees should be felled at the base and the trunk/significant limbs should be left intact (or in large sections) within the adjacent woodlands to rot and provide a dead wood source. Position in the same/or a similar aspect, ideally in a sunny location for the arisings.

7.4.3.4 The remaining **9no.trees** require further assessment during the detailed design process in order to retain these specimens by reducing, removing or creating bespoke design solutions where the works cannot be avoid within their RPAs. Whilst these trees are shown for potential removal/impact, it is anticipated that in the majority of cases the works can be limited or removed from the RPAs of these trees.

## 7.4.4 Arboricultural impacts – remaining trees surveyed

7.4.4.1 The impacts of the Scheme have been assessed, and table 7.3 below reflects the current **tree totals** for the remaining surveyed trees required for removal or potential removal to facilitate the works:

**Table 7.3: Arboricultural Impact Table – remaining trees surveyed**

Type	BS Category Reference			
	Category A no./area (m <sup>2</sup> )/m	Category B no./area (m <sup>2</sup> )/m	Category C no./area (m <sup>2</sup> )/m	Category U no./area (m <sup>2</sup> )/m
Individual Tree (T) and individual trees in groups	9no.	29no.	14no.	1no.
Groups (G)	22no. from groups	4no. from groups	4no. from groups	0

7.4.4.2 These trees are currently within or closely adjacent to the footprint of the proposals. Where trees have over 20% of their RPAs severed by the works the trees have been identified for potential or actual removal depending on feasibility of re-designing certain areas or structures. The 20% figure being specifically referenced within BS5837:2012 for what is deemed potentially acceptable in terms of RPA infringement. In some cases, trees could be retained through further detailed design, and confirmation on their removal should be undertaken prior to construction.

7.4.4.3 The trees for potential removal require further assessment during the detailed design process in order to retain these specimens.

### 7.4.5 Arboricultural impacts – TPO trees

7.4.5.1 No TPO trees have been identified for removal, but the trees are closely adjacent to the proposals, and in some cases their RPAs extend into the works areas.

7.4.5.2 Therefore, specific working measures adjacent to the trees would need to be confirmed in order to ensure the protection of the trees during construction. Any specific working measure would need to be confirmed within an AMS.

### 7.4.6 Arboricultural impacts – Painshill Park

7.4.6.1 Trees were recorded around the Gothic Tower as instructed. This was due to previous design iterations showing works within this area. However, design changes have occurred and informed by the tree survey in order to move the works in this location outside of the constraints imposed by the trees.

7.4.6.2 No trees have been identified for removal within the Gothic Tower area of Painshill Park.

### 7.4.7 Arboricultural impacts – RHS Wisley

7.4.7.1 The impacts of the Scheme have been assessed, and at present **7no.** trees along the east boundary with the A3 could be susceptible to changes in ground level either through loss of roots or alterations in soil moisture levels and may need to be removed for long term safety reasons. Further investigations into the root spread of these trees using a technique know as sonic tomography along with further work on the design of the retaining solutions and a more detailed survey of ground levels would be carried out in the detailed design phase to definitively establish the effect on the trees. The trees would be retained if at all possible.

7.4.7.2 The trees are listed below and include their RHS Wisley tree tag references where observed.

- T197 - Cultivar x canadensis 'Gaver', ref W903152-A;
- T192 - Populus x generosa 'Beaupre', ref W903156-B;
- T185 – Turkey Oak, no tag fixed to main stem;
- T184 – Giant redwood, ref W19981903-B;
- T181 – Red oak ref W19981893-A;
- T183 - Giant redwood, ref W19981903-A; and
- T176 – Norway maple Cultivar 'Charles F. Irish', ref W-964156-A.

7.4.7.3 This judgement is based on their RPA severance currently exceeding save thresholds for the construction of a retaining wall along the A3 embankment.

7.4.7.4 Confirmation on the potential to retain these trees is to undergo further assessment by mapping the actual root zones of the trees using sonic-tomography to determine extent of any root loss that could occur, and to reduce this where feasible through detailed design options, or again if feasible undertake tree works to reduce crowns to compensate for the extent of the root loss – in order to retain some part of the affected trees.

7.4.7.5 The remaining trees recorded in this area are either outside of the footprint of the retaining wall, or the RPA infringement is approximately at or below the 20% threshold. The requirements for any facilitation pruning of tree crowns extending into the works area from these trees has not been confirmed, and would require confirmation prior to construction.

## 7.4.8 Arboricultural impacts – Woodlands

7.4.8.1 The impact on the woodlands shall involve blanket felling and thinning where these fall within the DCO boundary. The extents of these operations are illustrated on Figure 9.8 'Vegetation clearance and management – overall plan'.

## 7.5 Mitigation

### 7.5.1 General

7.5.1.1 The mitigation measures will be developed during detailed design of the Scheme and approved prior to commencement of construction.

7.5.1.2 The areas of land that were not accessible will be assessed prior to the commencement of construction and surveyed in accordance with BS5837:2012 guidelines. The main areas that were not accessed during the tree survey are illustrated on the inserts below within the red outlines:

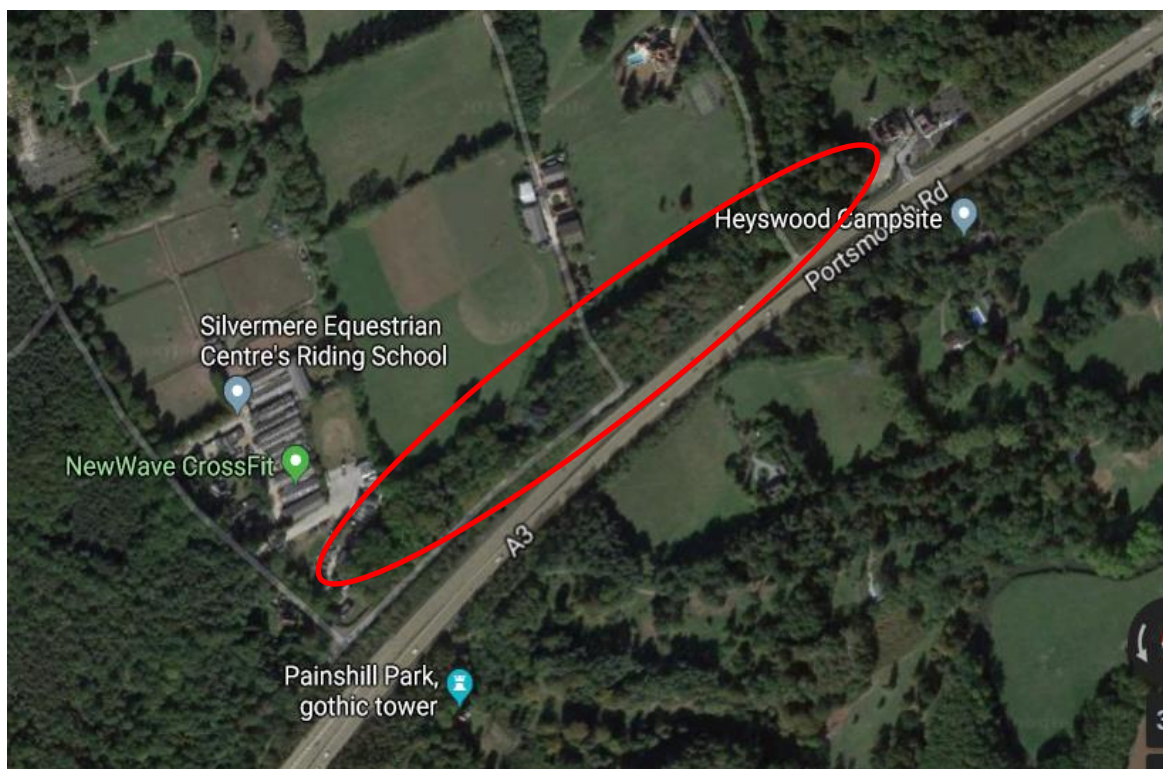
**Insert 7.1 land to east of A3, adjacent to former Wisley airfields**



**Insert 7.2 land to east of A3, south of former Wisley airfields**



### Insert 7.3 land to northwest of A3, between Redhill Road and Hilton Hotel



## 7.5.2 Arboricultural mitigation measures

- 7.5.2.1 The tree survey schedules (see Appendix B of this AIA) show management recommendations for those trees which at the time of the survey were identified as requiring management intervention. Any works recorded for retained trees will be confirmed prior to construction and included within an AMS.
- 7.5.2.2 As part of the Scheme certain trees have been identified for retention. In some cases, trees have the 'potential' to be retained, these have blue crosses on the TPPs, and their retention shall be confirmed prior to construction. Those trees that can be retained have no red or blue cross on the TPPs.
- 7.5.2.3 The location of any protective fencing for retained trees would need to be confirmed prior to construction and included within updated TPPs and supplemented by an AMS.
- 7.5.2.4 The specification for the protective fencing should be a 'Heras'-type fencing, which should be installed to protect both the crowns and RPAs of trees and to establish a Construction Exclusion Zone (CEZ) around the trees. Site operations not permitted in the CEZ without consultation with an arboriculturist include the storage of plant, equipment or materials; vehicular or plant access; the washing down of vehicles or machinery; the handling, discharge or spillage of any substances, including cement washings. No mechanical digging, scraping or excavation shall be permitted in the CEZ and no earthworks or changes in the finished ground levels other than those agreed by an arboriculturist.

# Appendices

# Appendix A. Tree survey key and method for measurements and categorisation criteria

## A.1 Survey Key

**Tree No:** Sequential reference number given to the tree or group of trees as shown on the tree survey drawings.

**Species:** This is the common name given to the tree. The botanical name is sometimes given.

**Height (Ht):** tree height from the base of the tree to its full stem height, measured in metres (m). Measurements are taken to the nearest half metre.

**Stem diameter (mm):** measured in accordance with figure A1 below. Measurements are rounded to the nearest 10mm.

**Branch spread (m):** measurement of crown spread to the four cardinal points; if the crown is balanced a single measurement is given. Crown spread plotted on the tree survey drawings. Measurements are taken to the nearest half metre.

**1<sup>st</sup> significant branch and direction of growth (m):** measurement of the height of the first significant branch above ground level, given in metres and direction of growth e.g. 2.4-N.

**Canopy height (m):** height of the canopy above ground level. Measurements are taken to the nearest half metre.

**Life stage:** The following abbreviations are used:

Y = Young trees <1/5 life expectancy

SM = Semi-Mature trees 1/5 – 2/5 life expectancy

EM = Early Mature trees 2/5 – 3/5 life expectancy

M = Mature trees 3/5 – 4/5 life expectancy

OM= Over-Mature trees >4/5 life expectancy

**Vitality: Good, fair, poor or dead**

**Good** – a tree with little or no obvious physiological defects; leaf density and colour is typical for the species, bud, flower and fruit production are good and there are no signs of dieback at any point throughout the crown.

**Fair** – a tree with moderate physiological defects; leaf density is less than typical for the species, leaf cover is chlorotic, bud, flower or fruit production are deficient, there are signs of minor dieback within the crown, there is a moderate degree of deadwood within the crown.

**Poor** – a tree with major or multiple physiological defects; evidence of extensive crown thinning, bud, flower or fruit production is poor or missing, there are signs of advanced dieback throughout the crown, there is extensive or major deadwood throughout the crown.

**Dead** – a tree that has died due to either old age, drought, disease, pest infestation, physical damage to the main stem or rooting system, or a combination of these factors.



**General observations, particularly of structural and/or physiological condition:** e.g. observations of any decay and physical defect.

**Preliminary management recommendations:** any identified preliminary management to rectify defects recorded in general observations. These may include the need for further detailed inspection, or works to address immediate hazard to life or property.

**Estimated remaining contribution, in years:**

<10

10+

20+

40+

**Category grading:** As per BS5837:2012 chart in accordance with figure A2 below.

A – Illustrated as light green (RGB code 000-255-000)

B – Illustrated as mid blue (RGB code 000-000-255)

C – Illustrated as grey (RGB code 091-091-091)

U – Illustrated as dark red (RGB code 127-000-000)

**Root Protection Area (m<sup>2</sup>):** plotted around each of the category A, B and C trees on relevant drawings, illustrating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability. The protection of the roots and soil structure is treated as of paramount importance.

**Impact:**

Remove – abbreviated as REM in red highlighted box

Part remove – abbreviated as PRG in orange highlighted box

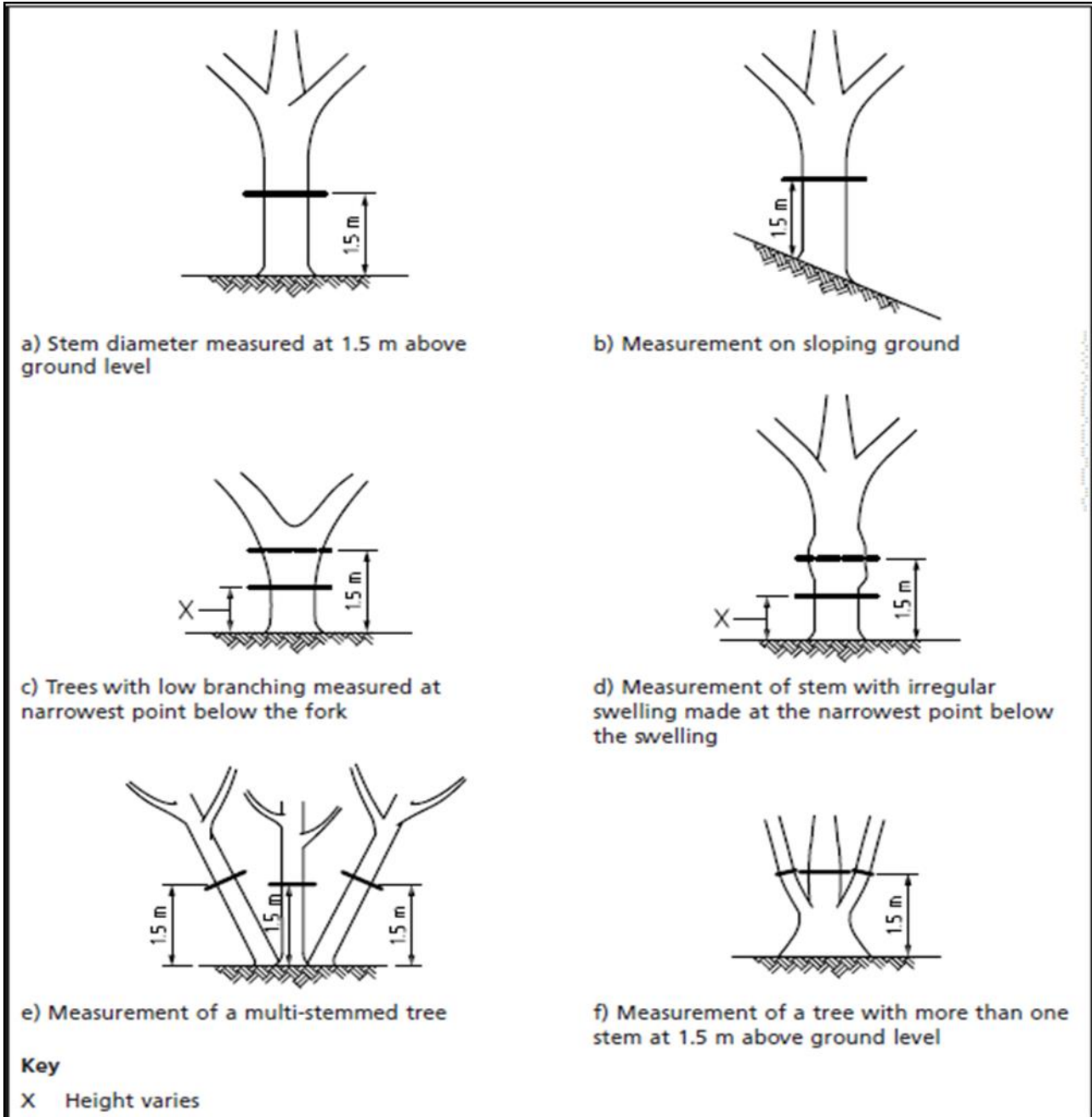
Potential remove – abbreviated as POT REM in blue highlighted box

Retain – abbreviated as RET in a green highlighted box

## A.2 Measuring table

### A2.1 Measurement of tree stems dependant on tree form

#### Insert 7.4: BS5837:2012 measurement of tree stems dependant on tree form methods



## A.3 BS5837:2012 Cascade Chart

### A3.1 Cascade chart for tree quality assessment from BS5837:2012

#### Insert 7.5: BS5837:2012 cascade chart for tree quality assessment

Category and definition	Criteria (Including subcategories where appropriate)		
<b>Trees unsuitable for retention (see Note)</b>			
<b>Category U</b> Those in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years	<ul style="list-style-type: none"> <li>Trees that have a serious, irremediable, structural defect, such that their early loss is expected due to collapse, including those that will become unviable after removal of other category U trees (e.g. where, for whatever reason, the loss of companion shelter cannot be mitigated by pruning)</li> <li>Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline</li> <li>Trees infected with pathogens of significance to the health and/or safety of other trees nearby, or very low quality trees suppressing adjacent trees of better quality</li> </ul> <p><i>NOTE Category U trees can have existing or potential conservation value which it might be desirable to preserve; see 4.5.7.</i></p>		
	<b>1 Mainly arboricultural qualities</b>	<b>2 Mainly landscape qualities</b>	<b>3 Mainly cultural values, including conservation</b>
<b>Trees to be considered for retention</b>			
<b>Category A</b> Trees of high quality with an estimated remaining life expectancy of at least 40 years	Trees that are particularly good examples of their species, especially if rare or unusual; or those that are essential components of groups or formal or semi-formal arboricultural features (e.g. the dominant and/or principal trees within an avenue)	Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features	Trees, groups or woodlands of significant conservation, historical, commemorative or other value (e.g. veteran trees or wood-pasture)
<b>Category B</b> Trees of moderate quality with an estimated remaining life expectancy of at least 20 years	Trees that might be included in category A, but are downgraded because of impaired condition (e.g. presence of significant though remediable defects, including unsympathetic past management and storm damage), such that they are unlikely to be suitable for retention for beyond 40 years; or trees lacking the special quality necessary to merit the category A designation	Trees present in numbers, usually growing as groups or woodlands, such that they attract a higher collective rating than they might as individuals; or trees occurring as collectives but situated so as to make little visual contribution to the wider locality	Trees with material conservation or other cultural value
<b>Category C</b> Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150 mm	Unremarkable trees of very limited merit or such impaired condition that they do not qualify in higher categories	Trees present in groups or woodlands, but without this conferring on them significantly greater collective landscape value; and/or trees offering low or only temporary/transient landscape benefits	Trees with no material conservation or other cultural value

# Appendix B. Tree Survey Schedule

## B.1 Veteran Tree Survey Schedule

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
G001	Common Oak	To 20	To 1000	To 10	4-NW	3	EM-M	Fair to good	Intermittent line of Oaks, average spacing 5m. Average offset from field boundary fence 2m. Wet ditch to east. Relatively high crown heights due to livestock grazing. Remnants of old field boundary. Dead wood in crowns at varying sizes, extensive dieback to occasional dead branches present. Wood decay fungi observed on minimum of two trees, <i>Griffola sulphurea</i> and <i>Fistulina hepatica</i> . Exposed decayed woody tissue. Scars and tears present within crown from previous storm damage. Hollowing stems in places.	No works presently required	40+	A2	RET	12.0
G002	Oak	22	800	8-N, 6	4	3	OM	Fair	Growing at 8m spacings on lightly raised mound along ditch at field edge; 15% deadwood; large diameter up to 150mm; splits, tears and snags; crown retrenchment; exposed buttress root formation giving habitat value	No current management recommendation	20+	B3	RET	9.6
G003	Oak	17	980	7.0	3	3.5	OM	Fair	Pair, extensive burring and galling on stems; 2m from fence; extensive basal decay; up to 10% dieback; deadwood to 150mm diameter; snags, tears and splits; <i>Fistulina hepatica</i> fruiting body in decomposed state	No current management recommendation	20+	B3	RET	11.8
G004	Oak	20	740	7.5	2	2	OM	Fair	Trio, average spacing 9m, location as previous; light bottle butt appearance suggestive of basal hollowing; 10% deadwood to 150mm diameter; tears, snags and splits	No current management recommendation	20+	B3	RET	8.9
G005	Common Oak	To 22	To 830	To 9	4-N	4	EM-M	Fair to good	Intermittent line of trees on edge of woodland. Average offset from boundary fence 3m. 1xstanding dead stem. Dry shallow ditch to south. Dead wood in crowns, occasional in places to over 200mm diameter. Hollowing on some stems. Exposed decayed woody tissue. Habitat holes present.	No works presently required	40+	A2	RET	10.0
G006	Goat willow	12	300 x 4 ave.	6.5	1	0	M	Good	Linear planting in meadow adjacent to ditchline with standing water; historically coppiced; collapsed stems, basal decay, exposed woody tissue; browsing damage decay on stems; 10% small diameter deadwood; splits, tears and snags; group includes oak (early mature ) to north and birch to south	No current management recommendation	20+	B3	RET	7.2
G007	Oak	17 ave.	680	6.0	2	2	OM	Fair to poor	Linear group, 8.5m spacings, on north of ditchline with standing water between fields; swollen buttresses indicative of basal hollowing; burring; indicators of acute oak decline; natural retrenchment; exposed woody tissue with insect entrance holes; 25% large diameter deadwood up to 250mm diameter; cavities on main laterals	No current management recommendation	40+	A3	RET	8.2
G008	Oak	to 16	830	6.0	2	1.5	OM	Fair/dead	Trio on north of ditchline between fields with standing water; basal decay with fruiting bodies of <i>Inonotus dryadeus</i> ; pinhole borer holes on stem; 350mm diameter deadwood; natural retrenchment; branch tears and snags; extensive AOD, with potential for water to act as vector	No current management recommendation	40+	A3	RET	10.0
G009	Common Oak	To 22	To 900	To 11	4-E	3	M-OM	Fair to good	3xtrees growing within field boundary group. Saturated ground to east. Hung up dead wood in south tree. Varying sizes of dead wood in crowns. North tree extensive dieback throughout crown. Exposed decayed woody tissue, soft rot present. Elongated cavity. Lightning strike damage. Habitat holes. Dead wood over 200mm diameter. Occupying approximately 40% of north tree crown.	No works presently required	40+	A3	RET	10.8
G010	Common Oak	To 17	To 870	To 9	3-E	2	M	Fair	3xtrees growing on internal field boundary. Wet ditch to east. Varying amounts and sizes of dead wood in crowns, central tree extensive dieback. <i>Ganoderma</i> spp wood decay fungi at base on central tree, extensive basal decay. Hollowing on stems. Lightning strike damage recorded.	No works presently required	40+	A3	RET	10.4
G011	Common Oak	To 16	To 850	To 5	n/a	3	OM	Dead	2xstanding dead trees. No live growth present. Extensive basal decay, exposed decayed woody tissue from base to full crown extents. Cavities present. Habitat holes. Frayed wounds.	No works presently required	20+	B2/3	RET	10.2

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
G012	Oak	23	to 1300	8.0	2	1	Vet	Good	5no oaks 6m apart on gently raised linear mound at western edge of wooded area; characterized by stilt-like buttresses; likely cause erosion of ground and decay, possibly Inonotus dryadeus; evidence of pinhole borer; typically 15% deadwood to 200mm diameter in crown; snags and tears; woodpecker holes; occasional large branch tears to 1800cm squared	No current management recommendation	40+	A3	RET	15.0
G013	Oak	to 23	1100	12-S, 7	2	1	M	Good	Row of trees at 8m spacings beside mud track; minor basal decay; evidence of historic AOD on main stem; 10-15% deadwood to 200mm diameter; branch tears and decay pockets at tear points; snags, tears and splits	No current management recommendation	40+	A3	REM 4NO. TREES	13.2
G014	Oak	to 23	970	10, 6, 9, 6	4	3	OM	Good	Group of 4 trees at 4m spacings on soft ground 12m from motorway fence; basal decay; 2no trees with dark exudation on buttress suggesting possible Armillaria; 15% deadwood to 300mm diameter, snags and splits, fallen deadwood to 200mm	Recommendation: monitor for Armillaria fungus on eastern and second from west specimens	40+	A3	REM 4NO. TREES	11.6
G015	Oak	20 ave.	840	8.0	4	3	OM	Good	Broadly linear group growing along dry ditch between field and track; deadwood to 150mm diameter; 10% deadwood; occasional cavities offering habitat opportunities at branch tear points; snags	No current management recommendation	20+	B3	RET	10.1
G016	Oak	20 ave.	to 1200	8.0	3	2	M	Good	Group growing along watery ditch between field and track; small decay cavities at branch tear points offering habitat opportunities; decay trenches on upper side of buttress roots; 15% deadwood to 200mm	No current management recommendation	20+	B3	RET	14.4
G017	Oak	to 23	820	9, 4, 9, 4	3	2	OM	Good to fair	7no trees at variable (min. 6m) spacings adjacent to wire fence; includes 1no dead; among living trees, around 15% deadwood to 200mm diameter; branch tears; extensive hollowing of base of fourth tree from east; colonisation by Agrilus beetle; Ganoderma brackets; 3 have basal decay in 3no trees	No current management recommendation	40+	A3	RET	9.8
G018	Alder, Common Oak	To 18	To 800	To 8	n/a	3	SM-M	Dead to good	Intermittent line of trees, wet ditch running directly parallel to south. Mutually suppressed crowns. Major and minor dead wood in crowns. Stubs and pieces over 250mm diameter. Cracks, cavities, rot sites.	No works presently required	40+	B2/3	RET	9.6
G019	Sweet chestnut	22	670 + 570	9.0	2.5	1.5	M	Good to fair	Pair of twin-stems forking near ground level, presumed formerly coppiced; cafe building 7m to south; less than 10% deadwood to 120mm; no 'natural bracing' between upright stems; minor pockets of exposed woody tissue at base; occasional branch tears	No works required at present	10+	B2	RET	10.4
G020	Oak	18	950	9.0	3	2	M	Good	Growing to north of watery ditch; 3no oaks at 10m spacings; 10% deadwood to 150mm diameter; branch stubs and tears; raised buttress roots with pronounced flare, giving 'Eiffel Tower' appearance; hollow basal cavities	No works required at present	20+	B3	RET	11.4
G021	Group of Alder	20-25	Ave=450	n3;e2 s8 w2	0.6	na	M	Fair to good	Linear group of 10+ trees at edge of woodland. Majority are multi-stemmed. Stem to west has failed close to ground with brown rot decay. 20% of stems have on-set of basal decay. Minor storm damage in crowns.	No Works Presently Required	20+	B2+3	RET	5.4
G022	2 x Common Oak	22	960	n12 e12 s11 w3	0.5	na	M	Good	Two even-aged trees with leans toward east due to historical light suppression. Large lateral tear outs leaving fracture wounds. Decay pockets at old wounds. 5% major and minor deadwood in crowns.	No Works Presently Required	40+	B2+3	RET	11.5
G024	Alder, oak	20	to 700	to 10-S	1	1	M	Good	Linear group at boundary between field and riverside wooded area, growing along earth bank of ditch; multi-stemmed alder and occasional oak/ash, with multistem hazel in between; historic decay, water pools and habitat opportunities at coppice points; light storm damage, dead branch stubs and deadwood to 150mm diameter; further similar pollard specimens and standard oak growing in irregular pattern north to river; occasional ivy encroachment	Remove deadwood only if works proposed within crown spread	20+	B2/3	RET	8.4

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
G025	Beech, oak	to 24	1440	8.0	2	2	Vet	Good	Beech plantation on large mound; oak at western fringe, occasional pine; tall trees at typically 5m spacings; handful of stumps with wood-decaying fungi; mutual crown suppression; storm damage - tears, cavities, water pools, numerous habitat opportunities in holes and niches; woodpecker holes; 5% deadwood not exceeding 150mm diameter	Remove deadwood only if works proposed within crown spread	40+	A2/3	RET	15.0
G026	Oak	to 18	960	8.0	4	4	M	Fair to good	6no oaks in line to west of 'permissive horse ride', along edge of wood; earthworks at base suggest historic boundary; includes T081; veteran characteristics include basal decay; failure of co-dominant stems and large branch tears; decay cavities offering habitat opportunities; advanced crown dieback and incipient retrenchment in southernmost tree; some branches historically cut back from path; some trees tagged	No works required at present	20+	B2/3	REM 4NO TREES	11.5
G027	Common Oak	To 22	To 1300	To 11	5-N	5	M	Fair to good	Intermittent line of trees. Growing within school grounds, directly adjacent to former access road. Access road currently contains piles of road chippings. Historic piles, self sown vegetation now established in places. Trees contain varying veteran features - frayed old branch wounds, decay cavities. Habitat holes. Sections of large diameter dead wood. Prominent given scale. sections of dead wood hung up in crowns & at bases.	No works presently required. Reduction of dead wood in crowns if works commce	40+	A1/2/3	RET	15.0
G028	Sweet Chestnut	To 22	1000	To 9	n/a	5	M	Good	Intermittent trees recorded closest to A3 boundary fence. Trees contain varying veteran features including sections of small to moderate diameter dead wood, generally limited to lower and middle of crowns. Occasional habitat holes. Tearout wounds from past storm damage. basal swelling on south east tree. Crown retrenchment.	No works presently required. Reduction of dead wood in crowns if works commce	40+	A1/2/3	POT REM	12.0
G029	Common Oak	24	To 1000	To 10	n/a	4	M	Good	Some 9m from A3 boundary fence. Mutually suppressed crowns. Occasional small to moderate diameter dead wood in lower crowns, likely to be as a result of a competition for light. Occasional tearout wounds from storm damage. Further tree adjacent to internal access road.	No works presently required. Reduction of dead wood in crowns if works commce	40+	A2	POT REM	12.0
G030	Sweet Chestnut	26	To 1080	To N-8	6-N	4	M	Good	Group of 6trees, pruning points. Occasional small to moderate diameter dead wood in lower crowns. Existing hard surface access road 3.5m from nearest tree. Trees approximately 28m from landtake boundary shown on site. Mutually suppressed crowns, slight drawn stems, but good stem tapers. Crowns historically lifted, occluded and open	No works presently required. Reduction of dead wood in crowns if works commce	40+	A2	RET	13.0
G031	Holm Oakx2	To 18	850	5.5	2-W	4	M	Fair	Growing within wooded area. Bottle butt appearance on both trees, indicating internal decay at bases. Cavities within basal areas, internal decay evident. Sheltered location. Occasional small diameter dead wood in lower crowns. Slight leans on main stems through competition for light.	No works presently required. Reduction of dead wood in crowns if works commce	10+	B2	RET	10.2
G032	Oak	to 20	to 740	7.0	6	5	M	Good to fair	Pair of trees 4m apart in wooded area, informal woodland track 3m to west; older northern tree has limbs cut back from overhead electricity wires, with fresh growth at wounds; both crowns modest, signs of retrenchment in higher southern crown; occasional long deadwood branches to 300mm diameter	Remove deadwood only if proposed works closely adjacent	20+	B2	RET	8.9
G033	Common Oak	16	650	6.5	3-NW	2	M	Fair to good	Growing on sloped bank of Gothic Tower. Crowns slightly reduced previously, occasional abrupt angles at pruning points. Earthworks undertaken within root zone of northwest tree. Increases in ground levels and tracking of plant. Occasional small diameter dead wood in lower crowns.	Remove soil piled within root zone of north west tree.	20+	B2	RET	7.8
G034	Sweet Chestnut, Beech	To 18	To 550	To 6.5	3-W	3	SM-EM	Good	Growing on sloped bank of gothic tower. Curved stems from sunlight competition. Beech approximately 2m from internal hard surface access road. No obvious direct damage recorded from surface root activity. Tree from 600mm above level of road to 1.5m.	No works presently required. Reduction of dead wood in crowns if works commce	20+	B2	RET	6.6
G035	Common Beech	24	950	To 8	3-S	3	M	Good	Growing on top of bank to south of internal access road. Mutually suppressed crowns. Occasional cavities within stems at old branch wounds. North tree previously reduced in height. Cut debris around base. Wood pecker holes beneath cut stems in crown. Potentially hollowing of main stem.	No works presently required. Reduction of dead wood in crowns if works commce	40+	A2	RET	11.4

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
G036	Scots pine	21	to 680 x 2	7 ave.	15	15	M-OM	Good to fair / dead	5no trees in woodland recently extensively cleared, 5m ave. distance apart; 2nd tree from west standing dead, <5% bark coverage; west and east trees forking at 1.5m, with eastern tree stem failed on north side (included bark); this tree has large secondary stem torn out at 6m, with stem fusion creating niche habitat opportunities; 20% dieback in crown; dead tree has advanced decay and insect colonisation; all trees with frequent deadwood branches to 300mm diameter and regulation storm damage; crown vitality fair	Remove deadwood as required if within 1.5 x falling distance of proposed works; remove large hanging branch from eastern tree	20+	B2 / C3	REM 4NO TREES	11.5
G037	Scots pine	to 20	730	5-N, 4	2	2	OM	Fair / dead	Pair of trees 7m apart, southern tree standing dead, forking at 2m, bark coverage limited to bole, which has exposed decayed heartwood limited to south side; northern tree originally 3no stems rising from fork at 2m; 2no stems blown out, with one stem lying to east, propped against tree; remaining stem tall, crown displaying good vitality; bole extensively rotted away at base to east and north	Monolith remaining living stem of northern tree if works proposed within 1.5 x falling distance	<10	C3	REM 2NO TREES	8.8
G038	Scots Pine	To 7	480	n/a	n/a	n/a	EM	Dead	Standing dead trees. Extensive exposed decayed woody tissue. Habitat holes. Elongated cracks and fissures.	Reduce in height if works within 1.5times height	10+	C3	REM 2NO TREES	5.8
G039	Common Oak	2.5	350	n/a	n/a	n/a	SM	Dead	Standing dead stem. Extensive exposed decayed woody tissue. Elongated cracks and fissures. Habitat value	No works presently required. Reduction of dead wood in crowns if works commence	10+	C3	RET	4.2
G040	Not used													
G41A	Common Beech	24	950	8, 7, 8, 4	3-SE	4	M	Good	Part of TPO, growing within Painshill park. 1m from boundary. Occasional branch wounds	No works presently required	40+	A2	RET	11.4
G41B	Common Beech	24	1000	8, 5, 8, 8	4-S	4	M	Good	Part of TPO, growing within Painshill park. Growing directly on boundary fence. Extensive surface roots into site. Depression of old ditch line	No works presently required	40+	A2	RET	12.0
G41C	Common Beech	21	950	8, E-8	5-S	4	M	Good	Part of TPO, growing within Painshill park. Growing 1.2m from boundary fence. Storm damage in upper crown, large diameter frayed wound in crown.	No works presently required	40+	A2	RET	11.4
G41D	Common Beech	24	750	8.0	6-S	5	M	Good	Part of TPO, growing within Painshill park. Growing directly on boundary fence.	No works presently required	40+	A2	RET	9.0
G41E	Common Beech	24	1000	8.0	5-SE	4	M	Good	Part of TPO, growing within Painshill park. Occasional storm damage recorded within crown.	No works presently required	40+	A2	RET	12.0
G41F	Common Beech	24	900	4.0	5-SW	5	M	Good	Part of TPO, growing within Painshill park. Pronounced south west scaffold branch	No works presently required	40+	A2	RET	10.8
G41G	Common Beech	20	800	7.0	2-S	2	M	Good	Part of TPO, growing within Painshill park. Co-dominant stems from approximately 4m, included bark at junction. Not significant at present.	No works presently required	20+	B2	RET	9.6



Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
G41H	Common Oak	18	450	5.0	5-S	5	SM	Fair	Part of TPO, growing within Painshill park. Growing directly on boundary. Occasional small diameter dead wood in lower crown. Loss of apical dominance.	No works presently required	20+	B2	RET	5.4
T001	Common Oak	11	460	4	4-E	3	SM	Poor	Extensive dieback, live growth limited to occasional epicormic growth. Crown reduced in places. Approximately 18m from road. Dead wood >200mm diameter. Tears & scars within crown from previous storm damage. Rot sites.	No works presently required	10+	C3	RET - TREE WORKS REQUIRED	5.5
T002	Scots Pine	22	760, 710	N-8, E-1, S-12, W-6	2-E	6	OM	Fair	Twin stemmed from base. East stem 25-30degree lean towards road. co-dominant union probed to 400mm. Build up of leaf matter at union. Crown dominant to east on east stem, tree would reach A3 boundary fence. Dead wood over 200mm diameter. Rot sites present. Scars and tears within crown from previous storm damage.	No works presently required	10+	C3	RET - TREE WORKS REQUIRED	12.5
T003	Scots Pine	7	870	0.0	n/a	n/a	OM	Dead	Standing dead stem. Extensive rot present. Habitat holes. Scars and old tears remaining on stem from previous branch failures.	No works presently required	<10	C3	RET - TREE WORKS REQUIRED	10.4
T004	Common Oak	18	760	4, 9, 10, 9	4.5-E	6	M	Good	Crown suppressed in places, kinked branches in upper crown. Life belts of reaction wood at 3.5m. Mammal activity around base to west, extensive soil piled around root flare. Pronounced east scaffold branch. Elongated cavity on upperside. Occluded from 2.5m. Scars from past storm damage within crown. Dead wood over 200mm. Saprohytic fungi on dead wood.	No works presently required	20+	B2/3	RET - TREE WORKS REQUIRED	9.1
T005	Sweet chestnut	17	1130	9.0	1-E	1	M	Good	Growing on highway verge. Sloped embankment. Crown breaks at 2m, open crown form. Abrupt angles on some branches where reduced in past. Dead wood in crown over 200mm diameter. Rot sites present. Scaring from previous storm damage on scaffold limbs. Wood boring insects present.	No works presently required	40+	A2/3	REM	13.6
T006	Sweet chestnut	23	1860	N-9, E-11, S-10, W-11	3-E	3	Vet	Fair to good	Ancient tree, 6m from boundary. Co-dominant stems from 1.8m, union appears sound. Occasional storm damage recorded in crown. Frayed wounds and hung-up dead wood. Within falling distance of trodden earth path	Remove hung up dead wood within falling distance of trodden earth	40+	A2/3	REM	15.0
T007 (0044)	Scots Pine	13	740	N-4, E-5, S-7, W-7	1.4-E	1.4	OM	Fair	Growing within woodland. Large diameter dead wood in lower crown, over 250mm diameter. Hazard beams on branches to west and east, horizontal cavities. Loss of apical dominance. Branch tears. Stubs of dead wood where pruned. Rot sites on exposed woody tissue. Scars & cavities present.	No works presently required	10+	C3	RET - TREE WORKS REQUIRED	8.9
T008	Scots Pine	17	1010@300	3, 6, 5, 7	1.5-S	6	OM	Fair	Co-dominant stems from 1m, east stem trifurcates 500mm above union. All unions appear sound. 2xstems to south and west on east stem extensive dieback, no live growth recorded. Hazard beam to west, horizontal cavity. Dead wood in crown over 200mm in diameter. Rot sites present. Scars and tears from past storm damage.	No works presently required	10+	B3	RET - TREE WORKS REQUIRED	12.1
T009	Common Oak	18	780	2, 6, 9, 7	6-E	6-E	M	Fair to poor	Crown breaks at 5m into multi stems. Unions appear sound. Extensive dieback & dead wood in upper crown. Live growth limited to south stem & occasional epicormic growth. Pruning points on main stem, partial occlusion. sap bleeds on main stem. Basal decay on east buttress root. Hollow sound to 3m. Scaring present in crown from previous storm damage. Dead wood in crown over 200mm diameter. Rot sites present. Exposed decayed woody tissue.	No works presently required	20+	B3	REM	9.4

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T010	Common Oak	16	900	7.0	4-N	5	OM	Poor	Extensive dead wood throughout crown, live growth limited to occasional epicormic growth. Lighting strike, exposed decayed woody tissue. Soft brown rot visible. Elongated scars from previous storm damage. Dead wood in crown over 200mm.	No works presently required	10+	C3	RET	10.8
T011	Common Oak	16	920	7.0	4-N	3	M	Fair to good	Main stem trifurcates at 5m, unions appear sound. Loss of stem to north. Hollowing at cavity. Large diameter dead wood. Rot sites in sections of dead wood.	No works presently required	40+	A2/3	RET	11.0
T012	Scots pine	24	1150 at 800	6.0	5-S	5	OM	Fair	10% deadwood, storm damage with snags, growing on raised bank at side of ditch at field edge; woodpecker holes denoting rot, torn limbs	No current management recommendation	40+	A3	RET	13.8
T013	Common Oak	20	1020	11.0	3-NE	3	OM	Fair	Part of an intermittent line of trees. Middle of grazing pasture. Saturated ground around base. Co-dominant stems from 4m, union appears sound. Extensive dieback throughout crown. Live growth limited to occasional epicormic growth. Decayed buttress roots; minor basal decay, galling on main stem; 15% 100mm diameter deadwood; minor snags and tears	No works presently required	20+	B2/3	RET	12.2
T014	Oak	16	850	7.0	2	1	OM		Exposed buttress roots; minor basal decay, galling on main stem; 15% 100mm diameter deadwood; minor snags and tears	No current management recommendation	20+	B3	RET	10.2
T015	Oak	15	900	6.5	1.5	1.5	OM		Growing on bank, water to east; 45° lean to east; extensive basal hollowing; root system decay; 30% deadwood to 250mm diameter; snags and tears, cavities in main laterals	No current management recommendation	20+	B3	RET	10.8
T016	Oak	11	830	5.0	2	2	OM	Fair	Grifola frondosa fruiting body at base; standing water close to east; natural retrenchment; 40% deadwood; minor snags and tears	No current management recommendation	20+	B3	RET	10.0
T017	Oak	27	1490	12-S, 11	6	6	Vet	Good	Standout specimen in row of trees at 8m spacings beside mud track; decay in western buttress area; 10% deadwood in crown; 200mm diameter hanging deadwood in southern crown; historically severed ivy; 12.5m to motorway fence	Recommendation: Arbotom investigation to determine scale of basal decay; possible reduction dependent on findings; proximity to motorway vs height	40+	A3	REM	15.0
T017-A	Common Oak	15	680	4.5	n/a	6	OM	Dead	Standing dead tree, edge of woodland. No live growth. Lose bark, exposed decayed woody tissue from ground level to full crown extents. Cavities and habitat holes present. Extensive basal decay, tree within falling distance of trodden earth path	Monolith at 6m.	10+	C3	REM	8.2
T018	Common Oak	14	680	6.5	3.5-W	3	M	Poor	Dieback to approximately 6m above ground level. Major dead wood in crown, over 300mm diameter. Lower crown establishing with epicormic growth. Elongated wound on north side of main stem from ground level to 2m. Decayed woody tissue beneath section of lose bark. Soft rot on north buttress root. Remaining roots sound.	No works presently required	20+	B3	REM	8.2
T019	Common Oak	4	700	0.0	n/a	n/a	OM	Dead	Monolithed standing dead tree. Exposed decayed woody tissue present. Hollowing main stem. Decay cavities.	No works presently required	10+	C3	REM	8.4
T020	Common Oak	3.5	450	1	n/a	n/a	EM	Dead	Standing dead tree, monolithed. Decayed exposed woody tissue. Laminated wood. No live growth recorded. Hollow.	No works presently required	10+	C3	RET	5.4
T021	Oak	20	970	6.0	3	1.5	OM	Fair	40% deadwood to 300mm diameter; extensive burrowing beneath base; exposed woody tissue and decay in buttress area; swollen basal appearance suggesting well developed basal rot	No current management recommendation	20+	B3	RET	11.6
T022	Common Oak	26	1280	9.0	3-E	3	Vet	Good	Natural retrenchment. Approximately 15% dead wood throughout crown. Staning and exudate on buttress to north. Storm damage to 3m east, frayed wound. Major tear remaining. Hollow at old branch wound to south.	No works presently required	40+	A3	RET	15.0

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T023	Oak	26	1820	10, 10, 12, 3	2	2	Vet	Fair	In row of trees at field edge; vast bole originally 3 stems, of which one remains; bole mostly decayed; armillaria, agrilus and pinhole borer colonisation; 800mm diameter fallen deadwood beside tree; 20% deadwood to 250mm diameter in remaining stem with natural retrenchment;	No current management recommendation	40+	A3	RET	15.0
T024	Oak	21	1480	7, 9, 7, 8	3-N	3	Vet	Good	Growing on west bank of variably dry ditch between field and track; light lean to east over track; natural retrenchment with 20% deadwood to 150mm diameter; snags and tears	No current management recommendation	20+	B3	RET	15.0
T025	Common Oak	15	820	5.0	n/a	3	OM	dead	Standing dead tree. historic Ganoderma spp on south buttress. co-dominant stems from 4m, union appears sound. No live growth. extensive bark loss	No works presently required	20+	B3	RET	15.0
T026	Scots pine	22	730	6-N, 4	14	13	EM-M	Poor	Tall specimen among several similar in woodland, crown vitality fair; 100mm wide crack 0-5000mm on south side, interior extensively decayed	Monolithing recommended due to risk of stem fracture and proximity to proposed works	<10	U	REM	8.8
T027	Scots Pine	5	450	0.0	n/a	n/a	OM	Dead	Standing dead stem. Wood boring insects. Decayed woody tissue. Rot sites. Cavities. Cracks. Habitat holes	no works presently required	<10	C3	REM	5.4
T028	Scots Pine	16	900	8.0	8-N	3	OM	Dangerous	Co-dominant stems from 1.8m, tight union. Stems fused to 1m above. North stem buckled and hanging, hose pipe. 10% dead wood in crown. Approximately 30% of root plate undermined to north. Potentially from accident and vehicle damage.	Fell on the grounds of safety as soon as reasonably practicable	<10	U	RET - TREE WORKS REQUIRED	15.0
T029	Scots Pine	18	450	4.0	n/a	4	OM	Dead	Standing dead tree. Soft rot. No live crown. Wood boring insects. Fomes. Stag head, dead wood in crown over 200mm.	Monolith to 4m if within falling distance of works	<10	C3	RET	5.4
T030	Scots pine	22	980 @ 500	6.0	1-W	2	OM	Good	Growing on raised ground partly eroded, leaving substantial roots exposed on west side; 30% deadwood in crown, focused on north and west sides, diameter to 340mm; large suspended branch part attached, west side; large branch tears, widespread exposed woody tissue; woodpecker holes, pooling water spots	Recommended to remove suspended branch	40+	A3	RET	11.8
T031	Scots Pine	12	1100	10	2-E	3	OM	Fair	Growing on west edge of woodland. Approximately 2.5m from boundary hardsurfaced footpath set 500mm below level of tree. Co-dominant stems from 1.6m, tight union, natural bracing present. 20% moderate diameter dead wood in crown. east scaffold branch hazard beam, hanging. Tears and cracks remaining. Squat habit. Hanging broken branch over footpath	Remove hanging broken branch over footpath	20+	A3	REM	13.2
T032	Scots pine	17	600 @ 500	6.0	2.5-E	2	OM	Dead	Dead monolith, formerly twin-stem, northern stem cut off above fork at 2m; no bark above fork; extensive insect colonisation and decay; fallen deadwood at base; growing beneath canopy of neighbour	Recommendation to monolith to safe height if within falling distance of proposed works	10+	C3	REM	7.2
T033	Scots Pine	12	1100	6.0	1-SW	4	OM	Fair to poor	Growing within woodland. Co-dominant stems from 1.8m. West stem dead. Hanging broken branches, no live growth. Rot sites, wood boring insects. Dead wood in crown over 200mm diameter. East stem 20% moderate diameter dead wood in crown. Largely lower crown. Shading.	Reduce west stem to 4m if works within falling distance	20+	B3	REM	13.2
T034	Scots pine	23	690	4-N, 6	9	7	OM	Fair	4m from highways fence, north-western stem all dead (360mm diameter) above fork at 5m; south-eastern stem has one large 300mm diameter deadwood branch at	Recommendation to monolith to safe height if	20+	B3	REM	8.3

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T035	Scots Pine	22	800	6.0	5-W	5	M	Fair to good	Growing within woodland. Approximately 20% moderate diameter dead wood in crown, largely lower crown. Dead wood over 200mm diameter in places. Hung up dead wood in crown. Dead wood stems to north. Swellies around base, reaction	No works presently required	20+	B3	REM	9.6
T036	Scots pine	23	600 + 580	2-W, 5	2	2	OM	Fair	Twin-stemmed, forking at 1300mm; crown growth suppressed by neighbour to west; 40% deadwood to 250mm diameter in crown, including shear crack branch on west side; branch tears	No works required at present	20+	B3	REM	10.0
T037	Scots Pine	19	850	7.0	8-SW	8	M	Good	Growing close to north boundary of woodland. Pronounced ribs of reaction wood at basal flare to 2.5m. Potential internal decay. potential habitat hole. Hanging torn branches. 5% minor dead wood in crown. Up to 100mm diameter. Co-dominant stems from 10m, cavity beneath union.	If works within falling distance remove hanging broken branches	20+	B3	REM	10.2
T038	Scots Pine	18	890	5.0	2-S	6	M	Fair	Growing within woodland, close to northern boundary. 30% moderate diameter dead wood throughout crown. Stubs of dead wood. Frayed wounds. Rot sites. Hanging broken branch to south. Wood boring insects. Dead wood in crown over 200mm diameter	No works presently required	20+	B3	REM	10.7
T039	Scots pine	23	610 + 610	2-N, 6	4-S	4	OM	Fair	Twin-stem, extensive 150mm diameter deadwood in lower crown; basal decay and insect colonisation at ground level, east side, with 400cm squared exposed woody tissue; occasionally fusion of branches / natural bracing; widespread stubs and tears	No works required at present	20+	B3	REM	10.4
T040	Scots Pine	22	800	5.0	6-E	12	M	Fair to good	Growing within woodland close to northern boundary. Evidence of storm damage in crown, large diameter frayed wound to south at 6m. Occasional sections of dead wood over 200mm diameter. Hanging broken branches. Rot sites. Stubs of dead wood where old branches failed. Splits and tears at old wounds	No works presently required	20+	B3	REM	9.6
T041	Scots Pine	4.5	400	0.0	n/a	n/a	EM	Dead	Standing dead tree. No crown. Extensive rot sites. Habitat holes. Cavities, cracks, wood boring insects	no works presently required	<10	C3	REM	4.8
T042	Scots pine	25	1100 @ 300	9.0	12	10	M	Good	Twin-stem, forking at 1500mm; 10% deadwood to 180mm diameter; branch stubs and small diameter tears	No works required at present	20+	B3	REM	13.2
T043	Scots Pine	4.5	400	0.0	n/a	n/a	EM	Dead	Standing dead tree. No crown. Extensive rot sites. Habitat holes. Cavities, cracks, wood boring insects	no works presently required	<10	C3	RET	4.8
T044	Scots Pine	5	500	0.0	n/a	n/a	EM	Dead	Standing dead tree. No crown. Extensive rot sites. Habitat holes. Cavities, cracks, wood boring insects. Ganoderma spp around base. Cavity on top	no works presently required	<10	C3	REM	6.0
T045	Sweet Chestnut	18	1800@500	7	5-W	5	Vet	Good	Co-dominant stems from 1m. Large main stem circumference. Mutually suppressed crowns. 5% moderate diameter dead wood in lower crown. Growing on earth bank. Frayed wounds on broken branch stubs. Occasional dead wood over 150mm diameter	no works presently required	40+	A3	RET	15.0
T046	Turkey Oak	26	1800	9, S-12	5-S	6	Vet	Good	Extensive reaction wood on main stem from 3m, occluded old branch wounds. Frayed storm damage. Existing access road 5m east. Prominent tree given size & scale.	no works presently required	40+	A3	RET	15.0
T047	Sweet chestnut	26	1370 @ 300	12-W, 9	7	7	M-OM	Good	Forking at 1800mm, western limb leaning at 40° angle; high crown has 20% deadwood to 250mm diameter; branch tears and stubs, pocket cavities where branches lost on bole	No works required at present	20+	B2	RET	15.0
T048	Scots Pine	4.5	400	0.0	n/a	n/a	EM	Dead	Standing dead tree. No crown. Extensive rot sites. Habitat holes. Cavities, cracks, wood boring insects	no works presently required	<10	C3	RET - TREE WORKS REQUIRED	4.8
T049	Scots Pine	4.5	400	0.0	n/a	n/a	EM	Dead	Standing dead tree. No crown. Extensive rot sites. Habitat holes. Cavities, cracks, wood boring insects	no works presently required	<10	C3	RET	4.8

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T050	Scots pine	20	720	5.0	4-S	5	OM	Fair	Growing on small mound; hollow to 4m south side, and 3-6m east side; dugout canoe-type hollowing of upper side of main limb to south; vitality of upper crown fair; branch stubs, 150mm diameter tears, slits of exposed woody tissue all occasional; 10% deadwood mostly sub-100mm diameter	Recommendation to monolith to safe height if within falling distance of proposed works	10+	B3	RET - TREE WORKS REQUIRED	8.6
T051	Scots Pine	18	650	6, S-0	10-W	10	M	Fair	Growing within woodland close to west boundary. Storm damage at top of crown, branches torn out and hanging. Elongated cavity at wound. Stubs of dead wood up main stem. Central stem split at 14m.	Monolith to 5m	10+	C3	RET - TREE WORKS REQUIRED	7.8
T052	Common Oak		1150		4-E	3	M	Good	Growing adjacent to grazing pasture. Adjacent tree fused at basal flare. Hollowing at base, basal cavities probed to 300mm. Occasional storm damage in crown, frayed branch wounds. Habitat holes. 5% minor dead wood. Prominent tree given size buttress roots sound.	No works presently required	40+	A1/2/3	RET	13.8
T053	Common Oak	25	1330	n9.5 e6 S9 w10	1	4 e&e	Vet	Fair to good	Previously tagged 0121. Crown breaks at 6m. Storm damage throughout crown. Decay cavities at old branch attachments on main stem. 5% large diameter deadwood to 35cm dia. Significant epicormic growth on laterals. Decay cavities at old wounds throughout crown.	No Works Presently Required	40+	A2 3	RET	15.0
T054	Common Oak	16	1030	n9 e9 s10 w8	1.5	2.8 e	M	Fair to good	Large diameter deadwood on ground. Woodpecker hole at 5m and 9m. 5% large diameter deadwood throughout crown. Storm damage throughout. Occasional torn-out sub-laterals	No Works Presently Required	40+	B2 4	RET	12.4
T055	Lime	22	930	10.0	1.5	1	M	Good	Parkland tree in exposed situation; numerous decay pockets at branch and branch end tears; 5% 100-150mm diameter deadwood; extensive rabbit burrowing at base; metal estate tree guard historically embedded in north stem; extensive insect colonisation of deadwood stubs	Remove deadwood only if works proposed within crown spread	20+	B2/3	RET	11.2
T056	Sycamore	23	750	n7 e4 s2 w7	1	1.9 n	M	Fair to good	Part of group of Oak & Lime. Basal decay to south can be probed 200mm, no related fungus observed. Pattern of decay suggests Kretzschmaria deusta. Crown breaks at 2m. Storm damage in crown mainly minor sub-laterals. 5% major deadwood in crown	Detailed inspection of stem, if access required within 1.5 times tree height.	20+	B3	RET	9.0
T057	Cherry plum	6	420	4.0	1	1	OM	Good	Parkland specimen; metal estate tree guard historically embedded in stem, creating numerous habitat opportunities; fruiting bodies of Ganoderma sp. at base to south and at 1200mm to east; tangled crown has light deadwood, branch tears, light dieback, insect colonisation of exposed woody tissue	No works required at present	20+	B2/3	RET	5.0
T058	Common Oak	9	1110	n4 e3 s1 w6	6	6 nw	M	Poor	Located at edge of woodland. Basal decay. Large tear out of co-dominant at 4m. Further tear out throughout crown. Woodpecker holes in main limbs. 10% desiccated deadwood in crown. Large diameter. Cracks and hazard beam.	Remove/ shorten large diameter deadwood overhanging public footpath.	10+	B3	RET	13.3
T059	Oak	19	410	6, 4, 1, 2	9	11	EM	Fair	4m into wood from boundary fence and footpath; slender stem has vertical strip of established decay 0-6m min., supporting small high crown; decay and cavity also at 8m, beneath historic branch tear, where decayed stub remains; 15% deadwood to 100mm	Monolithing advised to make tree safe while retaining habitat value	10+	U	RET	4.9
T060	Common Oak	20	570	n9 e3 s3 w3	1.5	8ne	EM	Fair to good	At edge of woodland. Storm damage in crown. Snapped out limb to south with significant decay, delaminated bar. Further lateral failure at crown centre. Crown heavily weighted and unbalanced above. 5% major deadwood in crown.	Monolith at 5-7m if access required within 1.5 times falling distance of tree.	40+	B2+3	RET	6.8
T061	Oak	20	710	10, 7, 0, 8	3-NW	1	EM-M	Good	4m into wood from boundary fence and footpath; major limb lost 9m south side, failure of compression fork with included bark; resulting large deadwood on ground has developing colonisation by saprophytic fungi; remaining crown growing to north has occasional branch stubs, leaves and deadwood to 120mm diameter stem	No works required at present	20+	B2/3	RET	8.5
T062	Common Oak	22	1800	n9 e7 s8 w9	1	4.5 e	vet	Good	At edge of woodland. Bottle butt appearance, long standing basal decay suspected. Possible historical colonisation by Inonotus dryadeus. Extensive, well developed buttress roots.	Climbing inspection, to check structural integrity of crown if access	40+	A2+3	RET	15.0

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T063	Oak	23	1550	11, 8, 12, 11	3	1	Vet	Good	Vast tree (4860mm girth) 2m into wood from boundary fence and footpath; large hollow beneath tree, north side - mallet sounding indicates broadly sound wood around circumference; 400mm diameter deadwood limb rising above crown break; branch tears, stubs, cavities, deadwood to 300mm all common	No works required at present	40+	A2/3	RET	15.0
T064-A	Oak	23	1110 at 500	5, 9, 13, 8	4	1	M	Good	At corner of plantation, watery ditch to west; possibly planted as a bundle to form one large tree, or chance fusion of 2+ trees; phototropic form; frequent deadwood branches to 150mm diameter; tears, stubs, missing bark; vegetation growing in organic matter collected in niche between stems	No works required at present	20+	B2/3	RET	13.3
T064	Common Oak	9	910	n6 e6 s3 w6	1	3.5 all	M	Fair to good	At edge of woodland. Old pollard at 3.5m. Decay cavities at old branch attachments at 3.5m. Large diameter deadwood to south at 5m. 5% major and minor deadwood in crown.	No Works Presently Required	40+	B2+3	RET	10.9
T065	Oak	17	530	6.0	3	2	OM	Dead	Standing dead tree, full branch network remaining; advanced decay of some branches; bark absent or lifted; advanced basal decay	Monolithing advised if within 1.5 x falling distance of proposed works	<10	U3	RET	6.4
T065-A	Common Oak	17	770	n9 e4 s3 w4	4	4 n	M	Fair to good	At edge of woodland. Basal cavity not currently significant. 15% large diameter deadwood in crown. Storm damage throughout crown. Bark fissures on stem and lateral branches.	Remove/ shorten large diameter deadwood over public footpath.	40+	B2+3	RET	9.2
T066	Oak	21	1230	10-S, 7	3-S	1.5	vet	Good	Ditch with small stream directly to south; some dieback at crown top - frequent deadwood to 150mm diameter throughout crown; decomposed fruiting bodies of fungus, possibly <i>Fistulina</i> , to north-west, woodpecker hole 6m north side; mallet sounding does not indicate advanced basal decay; right-angled re-growth at branch ends where storm damage has occurred; tagged tree	Remove deadwood only if works proposed within crown spread	20+	B2/3	RET	14.8
T067	Common Oak	22	1400	14	2-N	2	Vet	Good	Crown break at 2m, into multi stems, old pollard. Occasional tearout wounds in crown, exposed woody tissue. Occasional large diameter dead wood in crown.	No works presently required	40+	A1/2/3	RET	15.0
T068	Scots Pine	7	550	1.5-W	5-W	5	OM	Dead	Standing dead tree. Cracks in decayed wood. Exposed woody tissue throughout. Habitat hole at 4m, woodpecker or Owl. Hollow sections of main stem.	No works presently required	10+	C3	RET	6.6
T069	Scots Pine	8	900	N&E-0, 6	2-S	GL	OM	Poor	Co-dominant stems from 5m. Extensive storm damage, both stems hanging. Large diameter dead wood in lower crown. Habitat holes, cracks.	Maintain 1.5times height clearance from tree given structural defects.	20+	B3	RET	10.8
T070	Turkey oak	22	910 x 3	10, 10, 12, 15	2-W	1	Vet	Good	Growing on hilltop ridge near northern edge of coppice plantation; 5900mm girth at 300mm; 3no large stems rising from bole; fruiting body of unidentified fungus in niche at centre of bole; light storm damage in large crown, long low limbs extending laterally; 5% deadwood to 125mm	Remove deadwood only if works proposed within crown spread	20+	B2/3	RET	15.0
T071	Scots Pine	20	1200	9.0	3-W	1	OM	Good	Individual standard tree. Occasional moderate diameter dead wood throughout crown. Rot sites at stubs of dead wood. Storm damage recorded with frayed wounds in crown. Tears. Co-dominant stems from 5m, union appears sound.	No works presently required	20+	A1/2/3	RET	14.4

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T072	Silver maple	18	920	8, 3, 2, 7	1.5	1	M-OM	Fair to poor	Growing at edge of ornamental grouping amid parkland, crown growth suppressed by larger neighbours to south; co-dominant limb failed at fork at 2m, decay of trunk almost total from fork to ground level; fruiting bodies of Ganoderma sp. long established at base; possible further decay at wound at fork at 4m	Avoid area within 1.5 x falling distance of tree if possible; if not possible, reduce crown and remove larger deadwood	<10	C2/3	RET	11.0
T073	Common Oak	20	1650	13, N-8	5-W	8	Vet	Fair to good	Growing on edge of woodland. Crown still relatively full, sections of moderate to large diameter dead wood in lower crown to west. Hollow main stem. Large diameter basal cavity in main stem to north west. North & south scaffold branches torn out through storm damage. Cracks & splits at old wounds.	No works presently required	40+	A1/2/3	RET	15.0
T074	Lime	22	1050	10.0	1.5	1	M	Good	Parkland tree in exposed situation; numerous decay pockets at branch and branch end tears; 5% 100-150mm diameter deadwood; extensive rabbit burrowing at base; metal estate tree guard historically embedded in north stem; extensive insect colonisation of deadwood stubs; water pooling in cradle formed by branches south side, 5m; frequent deadwood not exceeding 150mm diameter throughout crown and on ground at base	Remove deadwood only if works proposed within crown spread	20+	B2/3	RET	12.6
T075	Common Oak	16	1000	4.5	4-W	5	M	Dead	Standing dead tree, trodden earth path to west. On edge of woodland. Crown break at 4m into 4xstems. Stag-headed appearance. Exposed decayed woody tissue. Habitat holes. Tear out wounds. Large diameter dead wood. Hollow main stem	No works presently required	40+	C2/3	RET	12.0
T076	Oak	17	1290	7, 3, 1, 3	8	9	Vet	Poor to dead	Woodland edge, path to south; minimal living branches, if any; large wound at 4m where 2+ large limbs historically lost; other large decay cavities where limbs lost; retrenchment/storm damage has left stag's head crown; woodpecker holes; bark lifted off greater part of bole; large deadwood on ground at base	Remove deadwood only if works proposed within crown spread	<10	B3	RET	15.0
T077	Common Oak	20	6.6m cir	11	4-N	4	Vet	Fair to good	Growing on edge of woodland. Basal cavities in between pronounced buttress roots, revealing hollow main stem. Crown break at 5m into multi stems. Old pollard. Unions appear sound. Decay visible at old branch wounds, including cavities. Occasional storm damage recorded, large diameter frayed tear out wounds. Natural crown retrenchment	No works presently required	40+	A1/2/3	RET	15.0
T078	Oak	20	1510	10.0	3	2	Vet	Fair to good	Tagged 122; growing at woodland edge beside bridleway; large limb tear-out at crown break, south side; numerous large branch tears throughout crown, mostly storm damage, leaving irregular crown; vitality good; numerous historic decay pockets at branch failure points affording generous habitat opportunities;	Avoid area within 1.5 x falling distance of tree if possible; if not possible, consider reduction of	20+	B2/3	RET	15.0
T079	Common Oak	24	1500di	13.0	8-S	3.5	Vet	Good	Growing on edge of woodland. Occasional moderate - large diameter dead wood in crown. Decayed woody tissue at old branch wounds. Basal cavities inbetween buttress roots. Hollow main stem.	No works presently required	40+	A1/2/3	RET	15.0
T080	Common Oak	24	1500	11	6-W	5	Vet	Good	Growing on edge of woodland. Storm damage recorded throughout crown, large diameter frayed wounds. Large diameter dead wood in lower crown to south west. Habitat holes.	No works presently required	40+	A1/2/3	RET	15.0
T081	Oak	17	830	3, 7, 9, 6	4	4	M	Fair to good	Crown growth mostly to south due to suppression by larger neighbour to north, and historic loss of large limb to north at crown break; other lost limbs at crown break resulting in handful of decay points; elsewhere, 350mm diameter branch tears not followed by re-growth; partial lifebelts on lower stem; some basal hollowness indicated by probe; mallet sounding does not indicate advanced decay in lower stem area; deadwood on ground at base; tagged 078	No works required at present	20+	B2/3	REM	10.0
T082	Scots Pine	5	290	0.0	n/a	n/a	SM	Dead	Standing dead stem. Decayed woody tissue visible. Wood boring insects. Stubs of dead wood. Cracks at failure point.	No works presently required	10+	C3	REM	3.5

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T083	Sweet chestnut	23	1020	7.0	2-SW	3	M-OM	Good	At side of track through woodland; swollen buttress area, mallet sounding suggesting basal hollowness and some decay of buttress roots; 2000cm squared pyramidal impact wound at base, north side; long decay strip down underside of first branch to south-west, extending to ground level; established reaction wood growth, both across reaction decay pockets where branches lost, frequent deadwood to	Remove larger deadwood only if within falling distance of proposed works	20+	B2/3	RET	12.2
T084	Sweet Chestnut	22	870	7.0	4-NW	4	M	Fair	Standard tree growing adjacent to elm lane. Existing access, not surfaced. Moderate diameter dead wood throughout crown. Habitat holes, tear out wounds throughout crown. Notable tear at 10m. Decay cavities present. Hung up dead wood in upper crown to south-west	Remove hung up dead wood in upper crown	40+	B2/3	RET	10.4
T085	Sweet Chestnut	12	1300	2, N&E-6	2-NE	4	Vet	Fair	Standard tree growing on historic earth mound. Formerly three stems from 2.5m, south stem failed, large diameter wound remaining. Central stem elongated wound to west side, potentially lightning strike scar. Hollow main stem. Dead wood in lower crown to south. Habitat holes on main stem	no works presently required	40+	A1/2/3	POT REM	15.0
T086	Oak	23	1240 at 1000	6, 5, 9, 9	4-SW	8-N / 2-S	Vet	Good	Twinstem at track side, 3900mm girth at 1000mm, forking at 1500mm; crown suppression to north; frequent deadwood stubs not exceeding 100m diameter; neighbouring tree close to north, fusing at base	No works currently required	20+	B2/3	POT REM	14.9
T087	Oak	14	960 at 1100	1, 11, 4, 1	2	3	OM	Fair	In woodland, wet ditch to west; southern stem historically lost above fork, entirely dead with historic brackets of Ganoderma at base; northern stem also failed at 10m, with historic decay to ground level - 600mm wide strip without bark; lateral branch extending east now sustains whole crown displaying fair vitality	No works currently required	10+	B2/3	RET	11.5
T088	Scots Pine	22	1020	6.5	2-S	7	OM	Fair	Standard tree growing within woodland. Formerly co-dominant stems from 3m, east stem failed. Leaving large tear-out wound. Moderate to large diameter dead wood throughout crown. Failed stem at base. Elongated scars and habitat holes within deadwood	No works presently required	20+	B2/3	REM	12.2
T089	Scots Pine	6	500	2.0	n/a	n/a	EM	Dead	Standing dead tree. Wood boring insects. Habitat holes. Sections of dead wood remaining in upper crown.	No works presently required	10+	C3	REM	6.0
T090	Scots Pine	16	850	5, 3-N&E	5-NE	4	OM	Dead	Standing dead tree. Extensive dead wood throughout crown, no live growth visible. Hung up dead wood. Wood pecker holes. Extensive exposed woody tissue. mammal activity around base.	No works presently required	10+	C3	RET	10.2
T091	Oak	22	870	3-S, 6	9	8	OM	Dead	(tagged 106) Standing dead tree, crown suppressed by neighbour to south; basal swelling, widespread woodpecker holes, bark absent west side 0-4m - much of stem decayed; rhizomorphs of honey fungus frequent on north stem	Consider reduction or pollarding only if closely adjacent to proposed works	10+	C3	RET	10.4
T092 (0111)	Common Oak	12	700	E-8, 0	n/a	3	M	Dead	Standing dead tree on edge of ancient woodland. Co-dominant stems from 3m. No live growth visible, extensive exposed decayed woody tissue. Habitat holes.	Reduce to 4m if within falling distance of works	10+	C3	RET	8.4
T093	Oak	18	660	2, 5, 4, 4	8	8	OM	Fair to poor	(tagged 110) Beside woodland path, historic long linear decay strip 500mm wide, south side consistent with lightning strike, columns of reaction wood growth both sides; habitat value increased by woodpecker; leading stem turning 90 degree angle to south, perhaps away from large neighbour to north, now felled; 150mm diameter long deadwood branches; good vitality in modest crown - mostly epicormic growth	No works currently required	20+	B2/3	RET	7.9
T094	Common Oak	16	750	8.0	4-S	4	M	Fair	Growing within nutberry farm land, approximately 10m from road. Extensive crown thinning and dieback in upper crown. Elongated wounds, moderate diameter dead wood. Wood pecker holes. Cavity at base.	No works presently required	40+	B2/3	RET	9.0
T095	Common Oak	7	700	S-3, 0	n/a	5	OM	Dead	Standing dead tree adjacent to Mill lane. No live growth visible. Extensive exposed decayed woody tissue. Wood pecker holes. Scars & tears. Large diameter dead wood remaining	Monolith to 3m given proximity to road	10+	C3	RET	8.4
T096	Common Oak	17	1010	9.0	2-S	1	M	Fair to good	Growing within nutberry farm. Multi stem from 6m. Unions appear sound. Decay cavities on sections of moderate diameter dead wood in upper crown. Dead wood at base.	No works presently required	40+	A2/3	RET	12.1
T097	Common Oak	16	1300	7.5	4-E	1	Vet	Good	Growing within nutberry farm. Notable given size, age and health. Crown break at 4m into 3xstems. Unions appear sound. Epicormic growth on main stem. Pronounced buress roots, no visible sign of dutch elm disease.	no works presently required	40+	A1/2/3	RET	15.0



Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T098	Sweet chestnut	19	4 x 450	4-S, 7	4	4	M-OM	Good	Lapsed coppice, central stem decayed, 4no stems rising around edges; roots to 75mm diameter describe into organic material accumulated inside stem; frequent long deadwood to 400mm diameter in crown	No works currently required	10+	B3	RET	10.8
T099	Oak	19	460	5.0	4	4	M	Dead	(tagged 0083) Standing dead tree in damp ground; 5% bark coverage	No works currently required	10+	C3	RET - TREE WORKS REQUIRED	5.5
T100	Common Oak	13	550	6, N-0	3-SE	5	EM	Dead	Standing dead tree. Habitat holes. Extensive exposed decayed woody tissue. Large diameter dead wood remaining in upper crown	No works presently required	10+	C3	RET	6.6
T101	Weeping willow	18	800	9-W, 7	2	0	M	Good	Growing in unmanaged area at outer edge of hotel grounds; large historic branch tear wound on main stem above crown break, similar smaller wound on smaller branch to north; large limb to north-west torn and suspended, dead, branches resting on ground; widespread 100mm diameter deadwood throughout crown, large decayed deadwood on ground	If close to proposed works, remove deadwood and bring hanging branches safely to ground; consider a careful pollarding of larger limbs to create a more compact, shapely tree	20+	B2/3	POT REM	9.6
T102	Common Beech	12	700	n/a	n/a	n/a	M	Dead	Standing dead tree. No live growth present. Wood pecker holes a varying points, Cavities. Wood decay fui Ganoderma spp at base. Extensive exposed decayed woody tissue.	duce in height if within 1.5xheight of works. No works presently required	10+	C3	RET	15.0
T103	Common Beech	9	650	n/a	n/a	n/a	M	Dead	Standing dead tree. Half stem circumference gone. Extensive heartwood decay visible. Habitat holes and wood pecker holes. Decay cavities, no live growth present.	duce in height if within 1.5xheight of works. No works presently required	10+	C3	REM	7.8
T104	Common Beech	20	1285	N-8, E-7, S-9, W-10	2.5-NE	1.5	M	Good	Approximately 8m from A3. Moderate ivy encroachment on main. Occasional small to moderate diameter dead wood throughout crown. Large diameter dead wood lying at base. Basal cavity to north east. Frayed old branch wounds throughout crown	No works presently required	40+	A1/2/3	REM	15.0
T105	Elm	14	450	n/a	n/a	n/a	EM	Dead	Standing dead tree. Extensive exposed decayed woody tissue. Habitat holes. Moderate diameter dead wood remaining in crown.	duce in height if within 1.5xheight of works. No works presently required	<10	C3	REM	5.4
T106	Oak	21	1000	8.0	4	3	M	Good	(tagged 038) Growing outside school fence - no access to south-eastern side; open crown has occasional branch tears and stubs, deadwood to 250mm diameter, notably low branch to north-east; ivy encroachment to mid-stem	Remove deadwood only if working beneath canopy of tree	40+	A2	POT REM	12.0
T107 (0041)	Common Oak	10	980*	W-2, 5	4-W	3	OM	Fair	Basenot accessible. Elongated wound on north sie of main stem, potentially old lightning strike wound. Saprohytic fungi present. Exposed decayed woody tissue. Old branch wounds and decay cavities.	No works presently required. Reduction of dead wood in crowns if works commce	40+	B2/3	POT REM	11.8
T108	Oak	25	1540	10.0	3-SE	2	Vet	Good	(tagged 042) Growing outside school fence - no access to south-eastern side; vast bole, forking at 2m; full occlusion of large wounds around folk where crown historically lifted; open crown has occasional branch tears and stubs, deadwood to 250mm diameter	Remove deadwood only if working beneath canopy of tree	40+	A2	POT REM	15.0

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T109	Common Oak	24	1410	13.0	4-S	4	vet	Good	Veteran given stem girth. Co-dominant stems from 3m, union appears sound. Natural bracing within crown, fused branches. Occasional small to moderate diameter dead wood in lower crown. Growing on eastern edge of woodland. Dry drainage ditch 2m west. Pronounced buttress roots.	No works presently required. Reduction of dead wood in crowns if works commence	40+	A1/2/3	POT REM	15.0
T110	Common Oak	24	1500	12.0	6-E	6	vet	Good	Veteran given stem girth. Occasional large diameter dead wood in upper crown. Decay cavities within branches & stems. Co-dominant stems from 2m. West stem contains large diameter dead wood. Full crown, no retrenchment obvious, upper crown generally healthy. Large diameter dead wood in middle crown. Dry ditch approximately 10m from base to east.	No works presently required. Reduction of dead wood in crowns if works commence	40+	A1/2/3	POT REM	15.0
T111	Common Oak	26	1680	12, S-8.5	5-SE	5	Vet	Good	Veteran tree given stem girth. No obvious crown trenchment. Occasional small to moderate diameter dead in middle & lower crown from sunlight shading. Dead ivy on main stem and into crown. Co-dominant stems from 2.5m, union appears sound. Limited basal flare potentially debris piled around base.	No works presently required. Reduction of dead wood in crowns if works commence	40+	A1/2/3	POT REM	15.0
T112	Sweet chestnut	16	990	1.5	n/a	n/a	M	Poor	(tagged 15) Monolith, all limbs cut back to stem, with fresh growth sprouting around wounds; long-established fruiting bodies of ? Ganoderma at base to south and east; mallet sounding suggests decay limited to basal area and not very widespread	No works currently required	10+	C3	RET	11.9
T113	Beech	26	970	7-E, 8	3-S	1	M	Good	Upstanding specimen in wooded area, 10m from carriageway boundary fence; minor dieback at extreme edges of crown; small diameter deadwood mostly confined to shaded lower crown	No works currently required	40+	A2	POT REM	11.6
T114	Sycamore	17	610	8.0	2-NW	2	M	Fair	8m from carriageway boundary fence; historically pollarded; decay and habitat holes around branch tear wounds around pollard boll; central stem hollow at base, opening low on east side; some storm damage in upper crown; small diameter deadwood	No works currently required	20+	B2/3	RET	7.3
T115	Beech	28	1280	10, 9, 13, 14	4-W	1	Vet	Good to fair	Parkland specimen, no previous size management, handful of 300mm diameter limbs removed, mostly to north around fork at 12m: these leaving gap in northern canopy, decay and minimal occlusion here; dieback at canopy extremes; occasional deadwood, mostly sub-100mm diameter	No works currently required	40+	A2/3	RET	15.0
T116	Oak	5	1850	3-N, 1	2	2	vet	Fair	3no stems rising from vast bole, all torn out at 4m; only live growth is epicormic growth on northern stem; extensive hollowness in basal area indicated by mallet sounding; high habitat and insect colonisation value; widespread advanced brown rot (number 19 on Painshill tree walk)	No works currently required	40+	A2/3	RET	15.0
T117	Holm Oak	22	1050	6.5	8-N	4	M	Fair	Crown previously reduced in height & lateral spread. Radial cavity in main stem from ground level to 2.5m, extending down from old branch wound. Internal decay evident, hollowing of main stem. Remnants of Ganoderma bracket at base to south, reduction in crown likely to manage risk of collapse. Further cavities at old branch wounds on main stem and in crown.	No works presently required. Reduction of dead wood in crowns if works commence	10+	B2/3	RET	12.6
T118	Beech	24	1270	9.0	6	1	Vet	Good	Large cavity where major limb lost at 16m; in more recent times becoming incorporated into younger wooded area to south; minor crown lifting above track to north; no previous size management	No works currently required	40+	A2/3	RET	15.0
T119	Sycamore	18	1000@300	W-9, 5, E-3	3-NW	3	M	Fair to good	Growing within wooded area. Landtake boundary tape passes through centre of tree. Multi stem form from 400mm. Suggesting past coppice. Stool appears sound. Tree growing approximately 7.5m from existing hard surface access road. Slight drawn stems. Mutually suppressed crowns.	No works presently required. Reduction of dead wood in crowns if works commence	20+	B2	RET	12.0

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T120	Sweet chestnut	24	1050	8-N, 7	4-NW	2-N	M	Good to fair	At northern edge of wooded area; fruiting bodies of Ganoderma sp. at ground level, south side; mallet sounding indicates localised decay of lower stem area; frequent deadwood to 200mm diameter, reasonable crown vitality; 8m to south of vehicle track	Remove deadwood only if proposed works closely adjacent	20+	B2	RET	12.6
T121	Common Beech	26	1520	11.0	8-W	3	Vet	Fair to good	Growing within wooded area, growing on descending bank to east. Pronounced buttress roots. Occasional cavities within basal area, revealing hollowing of main stem. No evidence of wood decay fungi at base. Helical ribs of reaction wood on main stem. Co-dominant stems. Extensive storm damage to upper crown. Both stems failing leaving large diameter frayed wounds. Decay cavity within main stem	No works presently required. Reduction of dead wood in crowns if works commence	40+	A2/3	RET	15.0
T122	Silver Birch	14	400, 300	3.5, N-8	2-N	3	M	Fair to good	Growing on sloped bank of gothic tower. Co-dominant stems from 1m. Union appears sound. Crown suppressed to south. Old branch wounds on north west stem.	No works presently required. Reduction of dead wood in crowns if works commence	20+	B2	RET	6.0
T123	Sweet Chestnut	14	700	6.5	4.5-N	4	M	Good	Growing on sloped bank of gothic tower. Curved main stem. Occasional small diameter dead wood in lower crown.	No works presently required. Reduction of dead wood in crowns if works commence	20+	B2	RET	8.4
T124	Sweet chestnut	18	820 + 780	8.0	4	2	M	Good	Twin-stemmed, forking at 1m; growing on wooded bank, 5m to east of vehicle track; large double crown has small diameter branch tears and deadwood only (deadwood infrequently to 200mm diameter); historic impact wound low on south side of southern stem (not 150cm square) has spread and decayed with insect	No works currently required	40+	A2	RET	13.7
T125	Sweet Chestnut	26	1000	7.5	6-S	6	M	Good	Growing on sloped bank of gothic tower. Prominent tree given height. Occasional small to moderate diameter dead wood in lower crown. Existing hard surface access road approximately 4m west, set approximately 1.8m below level of base of tree.	No works presently required. Reduction of dead wood in crowns if works commence	40+	A2/3	RET	12.0
T126	Beech	17	610	4, 5, 9, 8	2	1.5	M	Good	Growing on wooded bank, 5m to east of vehicle track; lean to south-east; historic branch tear wound, 2-4m, south side, has established decay and insect colonisation, strong columns of reaction wood growth; included bark; 2 x 280mm diameter branch tears on west side; crossing and fusion of branches in crown	No works currently required	20+	B2	RET	7.3
T127	Scots pine	18	570	5.0	5	3	EM	Good	(tagged 19 043) Close to junction of vehicle and woodland tracks, in area of recent clearance works; large remnants of tree rootplates and stems stored close by at base; electricity pylons/cable route adjacent to east	No works currently required	20+	B2	RET	6.8
T128	Sweet Chestnut	8	1200	3.5	3-NW	2	OM	Fair to poor	Growing approximately 2.5m west of internal access road, no direct damage recorded from surface root activity to hard surface. Limited live crown, mainly epicormic growths at or close to old branch wounds. Tree topped at 7m. Extensive bark displacement revealing laminated exposed woody tissue. Extensive cavities within main stem. Decay evident. Bottle butt appearance at base	No works presently required. Reduction of dead wood in crowns if works commence	40+	B3	POT REM	14.4
T129	Common Beech	24	920	6.5	6-NE	2	M	Good	Growing approximately 600mm from internal access road, no obvious direct damage recorded from surface root activity. Co dominant stems at 6m, unions appear sound. Crown sympathetically reduced in height & lateral spread previously. Abrupt angles on some ret	No works presently required. Reduction of dead wood in crowns if works commence	20+	B2	POT REM	11.0
T130	Oak	16	1550	9-W, 8	3	1.5	Vet	Good	At corner of pasture, vast bole, crown reduced by wind and also by saw, re-trenching; several 250-300mm diameter branch tears; 2m length large tear-out wounds, decay at tear-outs, notably 2m length tear at 6m, north side; historic impact wound ground level, east side; mallet sounding suggests localised decay in bole; ground at base compacted by farm animals	No works currently required	40+	A1/2/3	POT REM	15.0
T131	Scots Pine	11	900	4	n/a	n/a	OM	Dead	Standing dead tree in woodland. Extensive exposed decayed woody tissue. Scars. Habitat holes	No works presently required	10+	C3	REM	10.8

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T132	Common Oak	4	1250	2W-2	2-W	n/a	OM	Dead	Standing dead tree. Tearout wounds on main stem. Exposed hollow main stem. Large diameter dead wood on ground around base. Exposed decayed woody tissue, laminated wood.	No works presently required	20+	C3	REM	15.0
T133	Common Oak	4	1000	n/a	n/a	n/a	OM	Dead	Standing dead tree. Hollowing. Extensive exposed decayed woody tissue. No live crown. Elongated cracks & fissures.	No works presently required	20+	C3	REM	12.0
T134	Scots pine	10	850 at 750	3-N, 6	2	2	OM	Dead	(tagged 0068) Occupying prominent position on low mound in woodland, standing dead tree with full candelabra skeleton; 25% bark coverage, mostly on bole; advanced decay with established insect colonisation, showing larval tunnelling in exposed heartwood; originally of compact form, suggesting that younger neighbouring trees grew up around it	No works currently required	<10	C3	RET - TREE WORKS REQUIRED	10.2
T135	Scots Pine	6	380	n/a	n/a	n/a	SM	Dead	Standing dead tree. Extensive exposed decayed woody tissue. Frayed wounds. Habitat holes.	No works presently required	10+	C3	REM	4.6
T136	Scots Pine	18	1200	9.0	2-S	3	OM	Fair	Growing within wooded area. Extensive storm damage with large diameter frayed wounds. Large diameter dead wood around base & small to moderate diameter dead wood in crown. Cavities within old branch wounds and branch failures. Tears & scars. Pronounced basal stem	No works presently required. Reduction of dead wood in crowns if works commence	20+	B2	RET	14.4
T137	Sweet Chestnut	18	1200	5.0	1-NE	2	M	Good	Growing within wooded area. Natural crown retrenchment, small diameter dead wood in upper crown. Basal swelling with bottle butt appearance, indicative of tree species entering into ancient phases of life span. Snags of dead wood at old branch wounds. Decay cavities. Dead wood around base.	No works presently required. Reduction of dead wood in crowns if works commence	40+	B2	POT REM	14.4
T138	Common Oak	4	600	n/a	n/a	n/a	M	Dead	Standing dead tree. Failed portion of stem lying at base. Extensive exposed decayed woody tissue. Laminated effect. Elongated cracks and fissures in exposed wood. Ivy clad stem. Hollowing. Habitat value	No works presently required. Reduction of dead wood in crowns if works commence	40+	C3	RET	7.2
T139	Oak	18	860	1, 3, 7, 11	9	9	M	Fair to poor	(tagged 0061) forking at 3m, eastern stem historically lost, decay, exposed heartwood, woodpecker holes around failure point; western stem extending far to east and south; crown has hanging branches, 25% deadwood, mostly sub-100mm diameter, branch tears, further woodpecker holes in branches supporting live growth; mallet sounding suggests localised decay in north and east sides of lower stem	Remove hanging branches and deadwood only if works proposed within canopy of tree	20+	B2/3	RET	10.3
T140	Common Oak	20	1070	8.0	8-SE	8	M	Fair to good	Growing approximately 8m from hard surface footpath running parallel to A3. Light ivy encroachment on main stem and in crown. Large diameter tearout wound at 8m to east. Brown cubicle rot visible. Large diameter dead wood around base. Decay cavities within main stem. Habitat holes. Occasional small diameter dead wood in lower crown	No works presently required. Reduction of dead wood in crowns if works commence	40+	A2	RET	12.8
T141	Oak	23	1080 at 750	11.0	4	8	M	Good	At path junction, by wire fence; forking at 1500mm, both stems forking again at 4m, with one northern sub-stem historically failed, leaving long decayed branch end; crown vast, open, contains branch tears, stubs, woodpecker holes, but good vitality	No works currently required	40+	A2	RET	13.0
T142	Common Oak	22	980	10.0	3-E	8	M	Good	Growing within third party woodland. Approximately 5m from SWT footpath. Occasional small diameter dead wood in lower crown.	No works presently required. Reduction of dead wood in crowns if works commence	40+	A2	RET	11.8

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T143	Scots Pine	18	650*	3.0	n/a	n/a	M	Dead	Standing dead tree adjacent to parking area on Redhill Road. Basal area not accessible. Dense ivy encroachment on main stem. Elongated cracks and fissures. High risk of collapse.	Monolith at 4m.	10+	C3	RET	7.8
T144	Oak	21	950 at 1000	0, 3, 11, 11	5	8	M-OM	Good to fair	Woodland specimen; northern half historically lost at fork at 2m; southern stem forking at 4m, with northern sub-stem failed at 7m: woodpecker holes denoting decay 2m below failure point, fresh growth at failure point; southern sub-stem extending to south carrying remaining live growth; frequent 100mm diameter	Remove deadwood only if works proposed within canopy of tree	20+	B2/3	RET	11.4
T146	Common Oak	16	830	7, 7, 9, 7	3	2	M-OM	Good	Basal swelling, branch tears and stubs, frequent deadwood generally not exceeding 100mm diameter; clusters of epicormic growth	Remove larger deadwood only if works proposed within drip line of crown	40+	A2/3	RET	10.0
T147	Common Oak	12	700	To 3.5	3-SW	0	OM	Dead	Standing dead tree, no live growth visible. Large diameter dead wood throughout crown. Elongated cracks and in main stem and branches. Habitat holes. Saprophytic fungi. Large diameter cavities.	No works presently required	20+	B3	RET	8.4
T148	Common Oak	16	1150	To 7	3.5-W	1	Vet	Good	Early ancient. Basal area in depression. Occasional large diameter dead wood in lower and middle crown. Cavities at old branch wounds. Large diameter dead wood at base, from past storm damage.	No works presently required	40+	A3	POT REM	13.8
T149	Common Oak	16	600 + 690	8.0	2-S	1	M-OM	Good	With G40, part of a linear feature growing along low earth ridge - possibly former boundary line; twinstem, possibly two trees, now firmly fused at base; basal swelling suggesting hollowness in interior; frequent branch tears and stubs, occasional dieback at top of crown - 200mm diameter deadwood; old barbed wire embedded in base of stem - consistent with boundary tree	Remove deadwood only if works proposed within drip line of crown	40+	A3	RET	11.0
G40A	Common Oak	14	300;350;300 600;550	9, W-3	4.5-N	1	VET	Fair	Old coppice, part of historic field boundary. Multiple stems, raised buttress roots revealing cavities and hollows beneath root plate. Stubs of dead wood from past stem removals. Cavities in some stems. Saprophytic fungi on decaying stubs. Fused stems. Occasional moderate diameter dead wood in lower crown. Leans, mutually suppressed crowns.	No works presently required	40+	A3	RET	11.8
G40B	Common Oak	14	760;380;380 380	9, E-3	5-N	1.5	VET	Fair	Old coppice. Multiple stems from base. Cavities in basal area, dead wood and saprophytic fungi present. Stubs of large diameter dead wood in lower crown. Moderate diameter dead wood at base.	No works presently required	40+	A3	RET	12.1
G40C	Common Oak	14	1000;500;600	10, E-9, S-8	2.5-N	1	VET	Good	Old coppice stool. Cavities in basal area, raised buttress roots. Historic mound. Slopes away to south. Fused stems. Occasional small to moderate diameter dead wood in lower and middle crown. Cavities in old branch wounds.	No works presently required	40+	A3	RET	15.2
T150	Common Oak	24	1300	15, 11, 13, 13	2-N	1.5	VET	Good	Vast specimen on south bank of stream; large basal cavity; some dieback at crown extents - incipient retrenchment; frequent deadwood to 250mm diameter; branch tears and stubs; historic decay at branch failure points	Remove deadwood only if works proposed within drip line of crown	40+	A1/2/3	RET	15.6
T151	Common Ash	16	1350 at 1m	8, 7, 7.5, 12.5	2-NW	1	VET	Fair	On south bank of stream, two stems, southern stem dominant, both have tops historically blown out with subsequent re-growth; historic compression fork with large cavity between stems, and also stem hollowness; frequent large historic decay cavities; woodpecker activity; frequent L-shaped branches indicating tears and subsequent re-growth	Remove deadwood only if adjacent to proposed works	10+	B2/3	RET	16.2
T152	Common Oak	17	1150	7, 8, 6, 5	3-NE	1.5	VET	Fair	Basal cavities, pronounced buttress roots, reaction growth to basal decay. Hollowing of main stem. Remains of fisutlina hep in between buttress roots to north and east and south. Cavities in old branch wounds. Occasional large diameter dead wood in lower crown. Earth works 4m from base. Slight crown retrenchment. Small diameter dead wood in upper crown.	Exclusion zone	40+	A3	RET	13.8
T153	Common Oak	15	900	7, E-4	2-S	1.8	M	Good	Part of historic line of trees. Slight lean to north. Life belt of reaction wood on south west side of main stem. Occasional moderate diameter dead wood in lower crown. Cavities in old branch wounds.	No works presently required	40+	A3	RET	10.8

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T154	Common Oak	18	1200	10.0	3-S	1	VET	Fair to good	Early ancient. Historic pollard, multiple stems from approximately 5m. Large diameter dead wood at multi stem union from previously failed stems. Cavities in dead wood. Elongated cracks. Large diameter dead wood at base. Potential hollowing of main stem, cavities visible in between buttress roots.	No works presently required	40+	A3	RET	14.4
T155	Common Oak	18	720	6, 4.5, 7.5, 8	4.5-SE	5	M-OM	Poor	Growing in row - possible former boundary feature; crown 70% dead; north stem extensively decayed beneath historic branch removal; frequent branch tears and stubs, pockets of decay at branch failure points; fruiting bodies of Collybia fusipes fungus at buttress to east; mallet sounding denoting decayed buttress root to south-west	Remove larger deadwood only if works proposed adjacent to tree	20+	B2/3	RET	8.6
T156	Turkey Oak	18	620	8, 4, 8, 6.5	5-W	4	M	Good	Third party tree growing directly on boundary fence. Moderate ivy encroachment on main stem and into crown. Basal area not visible. Existing access road 2.5m west. No direct damage recorded from surface root activity.	No works presently required	40+	B2	REM	7.4
T157	Turkey Oak	18	650	3, 3, 7, 7	5-S	5	M	Good	Third party tree, basal area not visible. Main stem trifurcates at approximately 1.8m, tight unions, slight bark inclusion. Drawn stems through competition for light. Occasional small diameter dead wood in middle crown.	No works presently required	20+	B2	RET	7.8
T158	Sweet Chestnut	8	390	4, 8, 4, 0	4-E	2	SM	Good	Pronounced lean to east. Growing within TPO area. No root plate movement visible.	Consider coppice	10+	C2	RET	4.7
T159	Sweet Chestnut	20	690	4.5, E-11	7-E	7	M	Good	Part of TPO. Slight lean to east. High crown height.	No works presently required	20+	B2	RET	8.3
T160	Sweet Chestnut	18	360	3, 12, 1, 1	8-E	8	SM	Good	Part of TPO. Lean to east. Suppressed crown.	No works presently required	10+	C2	RET	4.3
T161	Common Beech	20	900	3, 7, 5, 3	6-E	6	M	Fair	Part of TPO. Evidence of storm damage recorded within crown, large diameter frayed wounds remaining. Onset of decay at some old wounds. Occasional small to moderate diameter dead wood in crown. Hazard beam in crown to west. Wood decay fungi laetiporus on south west buttress.	PICUS sonic tomograph survey	10+	C2	RET	10.8
T162	Sweet Chestnut	16	360	4, 6, 3, 3	6-E	6	SM	Fair	Part of TPO. Suckering growths from base. Dense ivy encroachment on main. Lean to east.	No works presently required	20+	B2	RET	4.3
T163	Sweet Chestnut	17	390	4, 9, 4, 4	2.5-E	2.5	SM	Fair	Part of TPO. Crown suppressed to west. Small diameter dead wood in lower crown.	No works presently required	20+	B2	RET	4.7
T164	Sweet Chestnut	19	1200	4,4,4,4	4-N	2	Vet	Fair	Veteran habitat features. Sap runs. Large diameter deadwood as stubs and exposed decayed woody tissue. Liasikns in dead wood. Crown reduced in height and lateral. Live crown mainly epicormic in havit.	No works presently required	40+	A3	RET	14.4
T165	Sweet Chestnut	8	2400	4,5,4,4,4	4.5-E	2	Vet	Fair	Veteran given ancient status. Crown break at 3m into 3no. Stems. Crown extensively reduced, live growth limited to mainly epicormic growths. Water pockets. Habitat holes. Extensive exposed dessicated woody tissue. Pronounced basal swelling. Existing access road 300mm from base.	No works presently required	40+	A3	POT REM	15.0
T166	Horse Chestnut	8	1000	5,5,3,5,4	3-SE	1	OM	Poor	Veteran given habitat features. Crown topped at 7m. Extensive decayed wood visible. Soft rot. Live crown mainly epicormic.	No works presently required	10+	B3	RET	12.0
T167	Birch	18	250	3.0	6	6	EM	Good	Upright, high crowned, 800mm from boundary fence	No works required at present	20+	C2	RET	3.0
T168	Silver Birch	12	190	3.0	4-E	4	SM	Poor	Formerly twin stemmed from base. East stem felled. West stem extensive fungal brackets up stem and dieback throughout crown. Believed to be innocuous spp.	Fell on the grounds of safety	<10	U	RET	2.3
T169	Sweet Chestnut	14	300	3.5	4-E	3.5	SM	Good	200mm from boundary fence. Small diameter dead wood in lower crown.	No works presently required	20+	B2	RET	3.6
T170	Western Hemlock	20	630	4.5	2	2	EM	Good	EMM Characteristic excurrent form, lowest branches dead as result of being shaded out; 4m from garden boundary fence; W963965-A	No works required at present	20+	B2	RET	7.6
T171	Western Hemlock	18	600	4.0	4-E	3	M	Good	2.5m from boundary fence. Upright habit, slight suppression to west. Resinous exudates around basal flare to west. Small diameter dead wood in lower crown.	No works presently required	20+	B2	RET	7.2
T172	Silver Birch	14	250;270;340	3.5	4-SW	4	EM	Fair	1.3m from boundary fence. Three stems. South stem co-dominant from ground level. Growing on slight raised mound. Mutually suppressed crowns.	No works presently required	20+	B2	RET	15.0
T173	Western Hemlock	20	600	5.0	2	1	EM	Good	EMM Memorial tree with commemorative stone at base; 2.8m from boundary fence; W964019-A	No works required at present	20+	B2	RET	7.2

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T174	Western Hemlock	16	530	3.5	4.5-E	3	M	Good	3.5m from boundary fence. Slight ivy encroachment on main stem. Small diameter dead wood in lower crown from sunlight shading.	No works presently required	20+	B2	RET	6.4
T175	Sweet Chestnut	22	870	4.5,6,5,4	5.5-SE	5	M	Good	W964147-A. 7m from boundary fence. Evidence of past crown reduction, abrupt angles on some branches in canopy. Past storm damage recorded on west side of mainstem with branch tear out wounds. Frayed wounds in upper crown.	No works presently required	40+	A2	RET	10.4
T176	Norway Maple	19	740	7,W-5	1.5	1.5	M	Good	Cultivar 'Charles F. Irish', W-964156-A, 1.8m from boundary fence; DIAMETER AT 900 Stem growth occluding large girdling root to south; established decay and cavities at branch tear wounds above crown break; occasional natural bracing where branches crossing in same area	No works required at present	20+	B2	POT REM	8.9
T177	Common Oak	24	950	4.5,7,9,6	6-E	6	M	Fair	W964158-A. 7.5m from boundary fence. Occasional small diameter dead wood in lower crown. Fused branches in upper crown.	No works presently required	40+	A2	RET	11.4
T178	Common Holly	6	80;180	2.5		0	Y	Good	Planted line of holly, average 1.2m from boundary fence. Planting spaces average 300mm. Screen function. Trees cut back in places around specimen individual trees, and west crowns lifted. Crowns overhanging boundary fence. Ivy encroachment on some stems.	No works presently required	10+	C2	RET	15.0
T179	Common Oak	14	480	7,7,3,3	2.5-E	2.5	SM	Fair	W19981889-B. 4m from boundary fence. Crown lifted and suppressed to south and west. Low branch extending over boundary to east. Occasional small to moderate diameter dead wood in lower and middle crown.	No works presently required	20+	B2	RET	5.8
T180	Leyland cypress	24	540	2,3,3,2	2	2	EM	Good to fair	Possibly cultivar 'Naylor's Blue', junior partner in triangular group, crown growth suppressed and in large part shaded out by larger neighbours - small diameter deadwood only; 4m from boundary fence	No works required at present	20+	B2/3	RET	6.5
T181	Red Oak	17	600	7.5, W-3.5	4-E	4	EM	Good	W19981893-A. 1.7m from boundary fence. Crown previously lifted to west. Occluding wounds present. Crown overhangs boundary fence to east. Occasional small diameter dead wood in lower crown.	No works presently required	20+	B2	POT REM	7.2
T182	Red Oak	20	630	6.5, W-7	3-E	3	M	Good	W19981899-A. 2.5m from boundary fence. Crown overhangs boundary fence to east. Occasional small to moderate diameter dead wood in lower and middle crown. Co-dominant stems from 8m, union appears sound. Dead ivy on stem.	No works presently required	40+	A2	RET	7.6
T183	Giant redwood	24	1700	4.5	2	1	M	Good	Dominant specimen, uncompromised excurrent form, 2.8m from boundary fence, growing on pronounced mound; RHS Wisley catalogue no. W19981903-A	No works required at present	40+	A1/2/3	POT REM	15.0
T184	Giant redwood	27	1790	4.5	2	1	M	Good	500mm from boundary fence; earth at base mounded; small bleed points where low branches removed on boundary side, wounds now mostly covered by bark; RHS Wisley catalogue no. W19981903-B	No works required at present	40+	A1/2/3	POT REM	15.0
T185	Turkey Oak	16	620	7, W-4.5	3-SE	2	EM	Good	Growing directly on boundary fence. Basal flare in contact with fence. Co-dominant stems from 2.5m, union appears sound. Light ivy encroachment on main stem. Crown cut back to east. Occasional small to moderate diameter dead wood in lower and middle crown.	No works presently required	20+	B2	POT REM	7.4
T186	Common Ash		430	5, W-4	2-E	2	SM	Good	700mm from boundary fence. Crown lifted to east over fence. Co-dominant stems from 2.5m, union appears sound. Occasional small diameter dead wood in lower crown.	No works presently required	20+	B2	RET	5.2
T187, T193, T196, G190	Leyland Cypress	14	350	3.5	N/A	0	SM	Fair	4xtrees, average of 2.5m from boundary fence. Crowns in contact with fence. Slight leans on stems to north east. No visible ground displacement around root plates. Mutually suppressed. Further trees to west.	No works presently required	10+	C2	RET	4.2
T189	Populus Simonii 'fastigata'	14	300;300;300;300	7, W-2	1-E	2.5	EM	Fair	W852515-A. Populus Simonii 'fastigata'. Commemorative tree. 6m from boundary fence. Multiple stems from base. Small to moderate diameter dead wood in lower and middle crown.	Remove dead wood in crown within falling distance of boundary.	10+	B2	RET	15.0
T191	Winter-flowering cherry	6	270	2,5,6,2	1.5-SW	1.5	M-OM	Poor	Prunus Subhirtella 'Autumnalis'; growing among brambles 4m from boundary fence; crouched form; multiple branch tears with established decay, also branch pruning cuts; fruiting bodies of Ganoderma-type fungus at basal graft point, and of Phellinus igniarius at crown break; crown growth mostly to south; RHS Wisley catalogue no. W840313-A	No works required at present	<10	C2/3	RET	3.2

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
T192	Populus x generosa 'Beaupre'	20	930	8.5,8.5,9,6.5	3-E	3	M	Good	W903156-B. Populus x generosa 'Beaupre'. Crown overhangs boundary. Pronounced south scaffold branch. Occasional moderate diameter dead wood in middle crown.	No works presently required	20+	B2	POT REM	11.2
TT94	Red Oak	16	280	1,8,3,1	2-E	1.5	SM-EM	Good	2m from boundary fence, slight lean to east and all crown growth to east, result of suppression by larger neighbour to west	No works required at present	20+	C2	RET	3.4
T195	Common Oak	14	340	2,5,4,2	2.5-E	2.5	SM	Good	3m from boundary fence. Mutually suppressed crown. Occasional small diameter dead wood in lower crown.	No works presently required	20+	B2	RET	4.1
T197	Hybrid black poplar	28	740	10.0	2-E	1	M	Good	Cultivar x canadensis 'Gaver', W903152-A, 4m from boundary fence; open upright form, occasional small diameter branch tears; part-torn branch to east resting on boundary fence; small diameter deadwood only	Remove part-torn branch if adjacent to proposed works	20+	B2	POT REM	8.9
T198	Western Balsam Poplar	20	570	6.5, W-3	5-E	4	M	Good	W903157-B. 5.5m from boundary fence. Occasional small to moderate diameter dead wood in lower and middle crown. Mutually suppressed crown.	No works presently required	20+	B2	RET	6.8
T199	Western Balsam Poplar	24	660	7,8,7,4	4-E	4	M	Good	7m from boundary fence. Mutually suppressed crown. Occasional small to moderate diameter dead wood in lower crown.	No works presently required	20+	B2	RET	7.9
T200	Hybrid black poplar	25	680	7,9,8,4	1.5-SE	1	M	Fair	Good to fair, possibly unknown cultivar; 3.6m from boundary fence; slight lean to east; crown growth suppression; frequent sub-75mm diameter deadwood	No works required at present	10+	C2/3	RET	8.2
T201	Hybrid black poplar	28	740	10.0	2-E	1	M	Good	Cultivar x canadensis 'Gaver', 4m from boundary fence; open upright form, occasional small diameter branch tears; part-torn branch to east resting on boundary fence; small diameter deadwood only; RHS Wisley catalogue no. W903152-A	Remove part-torn branch if adjacent to proposed works	20+	B2/3	RET	8.9
T202	Sweet Chestnut	38	1330	8,8,7,7	4-NE	3	M	Good	Vast twinstem with compression fork starting at 1500mm; frequent branch tears, deadwood to 225mm diameter, occasional hanging branches, part-torn branch at 8m to south-west; crown formerly lifted above track to west	Remove part-torn branch on south-west side	20+	B2	REM	15.0
G203	Scots Pine	26	650-900	9.0	9	9	M	Fair to good	Group of 5no. Trees. High crown heights, minimum 9m. Stubs of dead wood at old branch failures. Hung up broken branches in places. Column of decayed wood on main stem from old branch failure to ground level on central tree. Extent of internal decay not quantifiable. South branch has elongated wounds and growing on 40degree angle, increasing pressure on weakened branch. No targets at present within falling distance of branch, but tree could reach carriageway if it falls near its base.	PiCUS sonic tomograph to assess internal condition of wood on central tree.	20+	B2	REM	15.0
T204	Roble (Nothofagus obliqua)	30	720	10.0	9	7	M	Good	No access to base, dimensions estimated; growing in herbaceous border; branch tears and stubs throughout large crown; small hanging branches; frequent L-shaped branches throughout crown indicative of former tears and subsequent re-growth	No works required at present	40+	A2	REM	8.6
T205	Sweet Chestnut	26	780	6,7,5,4	7	7	M	Good	Locally dominant, initial lean to north-west correcting swiftly; frequent branch tears and 75mm diameter deadwood, with part-torn branch suspended on north-east side; former crown lifting on road side	Remove part-torn branch if adjacent to proposed works	20+	B2	REM	9.4
T206	Sweet Chestnut	22	700	6,10,7,4	8-E	8	M	Good	Existing compacted aggregate pathway 1m south. Large branch tearout wound at 8m. Occluded wounds on main stem.	No works presently required	20+	B2	REM	8.4
T207	Sweet Chestnut	20	700	6,8,3,6	6-n	6	M	Good	Approximately 3m from existing road. No direct damage recorded from surface root activity. Crown suppressed to south.	No works presently required	20+	B2	REM	8.4
W001	A Woodland	to 19	to 500	5.0	n/a	n/a	SM-M	Good	Abundant birch, frequent oak, occasional Scots pine, no understorey; bracken and bramble ground cover; occasional standing dead tree; more mature oak to west; infrequent laurel, holly, goat willow; spacing variable, average 5m; height mostly uniform - 19m; diameters: pine 200-600mm, birch sub-300mm; birch early mature or younger - no old specimens	No works presently required	40+	B2/3	PRG	6.0
W002	A Woodland	to 19	to 500	5.0	n/a	n/a	SM-M	Good	Patchy tree cover; abundant semi-mature birch at 3-5m average spacing, occasional mature or early-mature Scots pine to 700mm diameter; bracken, some gorse ground cover; birch average height 8m, pine to 19m but mostly 10-14m; trees mostly on linear earth mound dating from motorway construction	No works presently required	40+	B2/3	PRG	6.0
W003	not used													



Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
W004	A Woodland	19	100-450	4.0	n/a	n/a	Y-EM	Fair	Pine dominant, Birch frequent. Occasional Oak. Bracken and gorse undergrowth, dense restricting ground flora and more extensive regeneration. Relatively uniform vertical structure. Topographical changes, mounds present. Buffer incorporating footpath between woodland and highway boundary, 15-20m. Occasional birch within zone. No shrub understorey. Occasional standing dead stem. Average spacing 3-5m. Thinning operations carried out.	No works presently required	40+	B2	PRG	6.0
W005	A Woodland	20	80-1000	6.0	n/a	n/a	Y-OM	Good	Mixed woodland, broadleaf dominates. Oak and sweet chestnut abundant, with mature specimens. Frequent birch. occasional Beech & hornbeam, occasional scots pine, generally over mature and in a state of decline or collapse. Habitat value. Young oak and other broadleaf saplings. Occasional holly in understorey. Areas of bracken. Standing dead stems and collapsed. Average spacing 5-8m. Varied vertical structure, no woodland edge. Varied horizontal structure. Pockets of rhododendron	No works presently required	40+	A2	PRG	10.0
W006	A Woodland	20	80-600	6.0	n/a	n/a	Y-M	Good	Mixed woodland, broadleaf dominates. Abundant Birch, frequent oak, young to early mature. Occasional sweet chestnut, sycamore. Occasional pine, often over mature and in decline. Standing dead trees and collapsed. Pockets of bramble and bracken in spaces not occupied by trees. Young saplings in understorey. Varied vertical and horizontal structure. Average spacing 3-5m. No shrub understorey or woodland edge habitat.	No works presently required	40+	B2	PRG	6.0
W007	A Woodland	18	80-400	6.0	n/a	n/a	Y-EM	Fair	Mixed woodland, broadleaf dominates. Young to early mature. Abundant birch, occasional pine, rare oak - mainly young self sown specimens. Dense bracken understorey. Average spacing 2m. Relatively uniform vertical structure. No shrubs or woodland edge habitat. Occasional standing dead stem and collapsed.	No works presently required	40+	B2	PRG	6.0
W008	A Woodland	16	80-650	6.0	n/a	n/a	Y-M	Fair to good	Mixed woodland, broadleaf dominates. Abundant oak - young saplings and mature trees. Frequent birch, Occasional pine - semi-mature. Occasional beech. Pockets of bracken. Varied vertical and horizontal structure. Varied age. Hanging broken branches collapsed stems.	No works presently required	40+	B2	PRG	6.0
W009	A Woodland	to 20	to 600	5.0	n/a	n/a	EM-M	Good	Oak dominant, frequent Scots pine, occasional birch and beech; spacing between trees varied but typically wide - 8m average; only occasional dominant trees displaying significant lateral growth - uniformly high crowns, pockets of holly, minimal elder understorey, light bramble groundcover - feeling of openness; occasional standing or part fallen dead trees; beech younger - 150-200mm diameter typical; handful of more mature oak towards western edge; cattle have access at time of survey	No works presently required	40+	B2/3	PRG	6.0
W010	A Woodland	18	150-1000	6.5	n/a	n/a	Y-M	Good	Broadleaf woodland. Abundant beech, young to sm. Occasional oak, mature trees, confined mainly to boundaries. Rare pine. Standing dead stems. Collapsed dead wood. Uniform vertical structure. No understorey or woodland edge habitat.	Thinning.	40+	B2	PRG	10.0
W011	A Woodland	to 24	to 600	6.0	n/a	n/a	M	Good	Section marked by strong undulations in ground level, Scots pine at 8m average spacing dominant, broadleaf species at edges (including beside A3) and filling gaps, frequent birch and chestnut, occasional oak, rare goat willow; chestnut occasionally large, twin-stemmed, coppiced near road; occasional standing dead, monolith or snapped stems of pine; widespread groundcover of bracken, dense clusters of young birch; significant thinning operations in progress at time of survey	No works presently required	40+	B2/3	PRG	6.0
W012	A Woodland	20	80-750	6.0	n/a	n/a	Y-M	Good	Mixed broadleaf. Recently thinned. Sycamore and Oak frequent. SM to M. Occasional birch and Alder. Occasional holly in understorey vegetation. Young sycamore establishing throughout. Rare Ash and hornbeam. Felled trees and brush through out understorey.	No works presently required	40+	B2	PRG	6.0
W013	A Woodland	18	80-650	6.0	n/a	n/a	Y-M	Good	Mixed woodland, conifer dominant. Pine abundant 20m from highway. Birch abundant within 20m. Oak frequent. Young to EM. Occasional goat Willow. Dense Bracken understorey. Thinning of birch recently undertaken. Rare standing dead stem. Cut brush and stems of birch on ground.	No works presently required	40+	B2	PRG	6.0

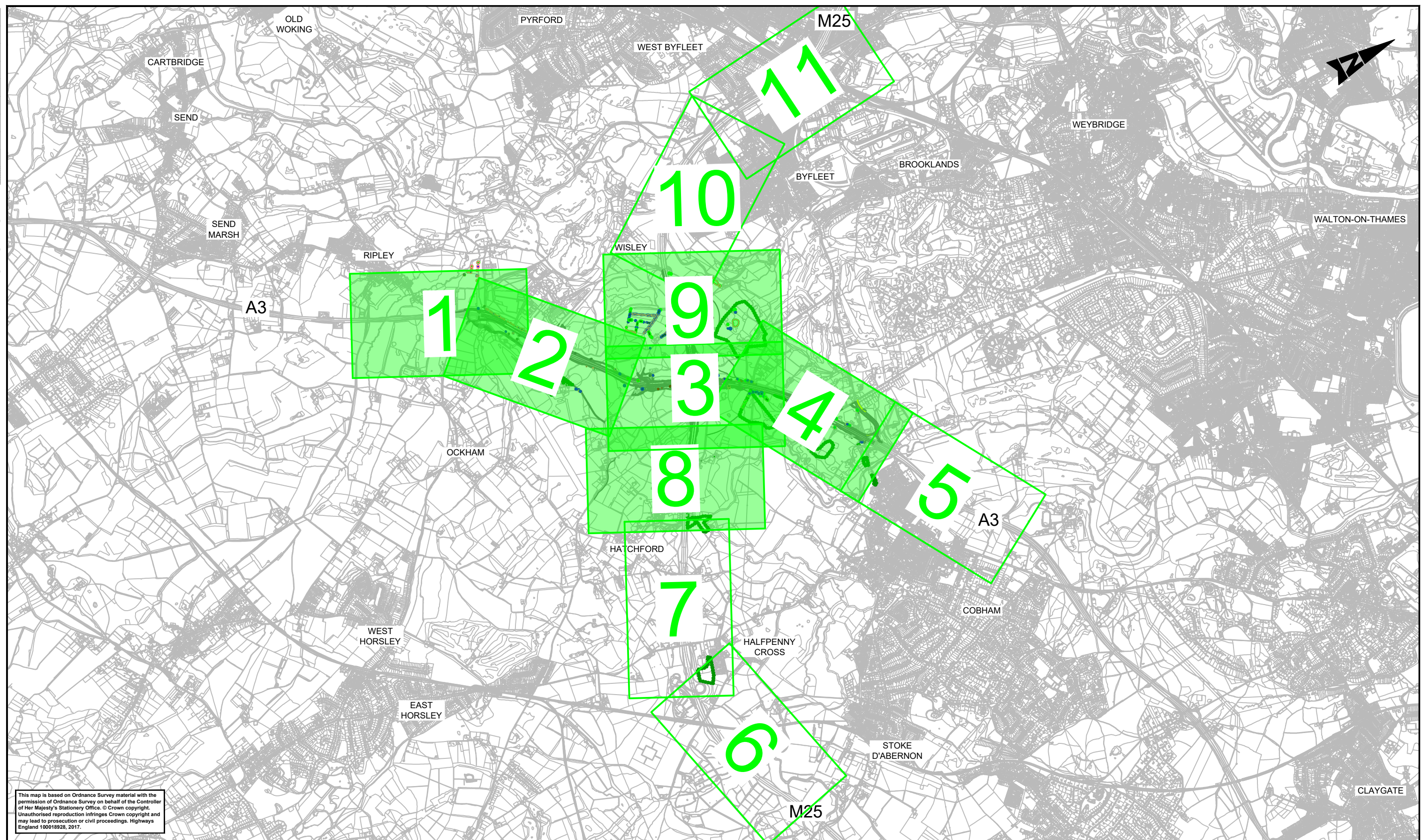
Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary management recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
W014	A Woodland	to 20	to 300	5.0	n/a	n/a	SM-M	Good	Compartment with open character, mixed age birch dominant, frequent oak, including notably tall mature specimens; occasional chestnut; frequent multi-stemmed hazel, with abundant bracken and bramble; spacing variable, average 8m	No works presently required	40+	B2/3	PRG	4.0
W015	A Woodland	18	80-650	5.0	n/a	n/a	Y-M	Good	Mixed woodland, conifer dominant. Pine abundant. birch frequent. Oak occasional. Sycamore and goat willow occasional in woodland. Standing dead stems rare. Dense bracken understorey. Drainage ditch along west boundary with road. Abundant goat willow and birch along drainage ditch.	No works presently required	40+	B2	PRG	6.0
W016	A Woodland	to 24	to 500	5.0	n/a	n/a	M	Good	In area of damp ground, alder dominant at 5m average spacing, frequently twin-stemmed, characteristic excurrent form; occasional oak and pine; between mature trees, juvenile sycamore, beech, elm; frequent elder, occasional holly, widespread bracken groundcover, infrequent standing dead trees	No works presently required	40+	B2/3	PRG	6.0
W017	not used													
W018	A Woodland	24	80-1000	8.0	n/a	n/a	Y-M	Good	Broadleaf woodland. Oak abundant, young to mature trees. Sweet chestnut, Sycamore, silver birch and Ash occasional. Saplings in understorey. Abundant multi stem hazel in understorey. Occasional elder goat willow and holly. Pockets of scrub. Ivy clad stems. Standing and collapsed dead wood. Drainage ditch along west boundary. Woodland edge habitat. Varied vertical structure. Standing water.	No works presently required	40+	A2	PRG	10.0
W019	A Woodland	24	80-1000	8.0	n/a	n/a	Y-M	Good	Mixed woodland. Oak and pine frequent. Young to mature trees. Young oaks establishing. Occasional ash and sweet chestnut. Frequent birch at north extents. Dense Bracken understorey in places. Hazel and holly frequent in understorey. Fallen and standing deadwood. Clearings in places. Average spacing 8m. occasional goat willow.	No works presently required	40+	A2	PRG	10.0
W020	A Woodland	to 24	to 600	5.0	n/a	n/a	EM-M	Good	Scots pine and birch, with pine dominant, though few fully mature specimens; average spacing 6m, birch diameter rarely exceeding 250mm; infrequent wind-snapped birch stems; broadleaf species along woodland edge close to road include occasional chestnut, infrequent sycamore, oak, goat willow	No works presently required	40+	B2/3	PRG	7.2
W021	A Woodland	to 27	to 700	5.0	n/a	n/a	EM-M	Good	Scots pine dominant, ages ranging from semi-mature to mature; average spacing 5m; scattered birch, diameter rarely exceeding 200mm diameter; infrequent clusters of birch poles, e.g. near highway; occasional veteran specimens of pine, characterized by boles to 1200mm diameter, branch tears and stubs, hanging branches; occasional standing dead pine, or monoliths following stem failure; other broadleaved species (e.g. oak) rare; bracken understorey, in places tall, in places absent	No works presently required	40+	A2/3	PRG	8.4
W022	A Woodland	to 26	to 600	5.0	n/a	n/a	EM-OM	Good to fair	Scots pine and birch woodland, more open than W021, ground conditions noticeably damper, with small pools in interior area; birch component older than in W021; average tree spacing 6m, but large areas without trees except young birch; occasional veteran specimens of pine, characterized by boles to 1200mm diameter, branch tears and stubs, hanging branches; frequent dead or dying pine and birch, mostly standing; frequent fruiting bodies of Piptoporus (birch) and Phaeolus (pine); infrequent trees of other broadleaved species (chestnut, goat willow); groundcover of bracken, bramble, infrequent holly.	No works presently required	40+	B2/3	PRG	7.2
W023	A Woodland	to 26	to 700	5.0	n/a	n/a	EM-M	Good	Scots pine dominant, ages ranging from semi-mature to mature; average spacing 5m; scattered birch, diameter rarely exceeding 200mm; more open with higher concentration of birch near highway; infrequent veteran specimens of pine, characterized by boles to 1200mm diameter, branch tears and stubs, hanging branches; occasional standing dead pine, or monoliths following stem failure; other broadleaved species (e.g. oak) rare; abundant bracken understorey	No works presently required	40+	A2/3	PRG	8.4
W024	A Woodland	to 24	to 600	5.0	n/a	n/a	M	Good	Mixed woodland with Scots pine dominant, but with greater quantity (c.40%) and variety of broadleaved (chestnut) and coniferous (Western hemlock) species and understorey (laurel, rhododendron, holly); ivy established in occasional trees; bracken; occasional standing dead or wind-snapped trees; trees at average 7m spacing; open patches colonized by young birch	No works presently required	40+	B2/3	PRG	7.2

Tree ID	Species	Height (m)	Stem Diameter (mm)	Branch spread (m)	First significant branch height (m)	Canopy height (m)	Life Stage	Vitality	General observations	Preliminary magement recommendations	Estimated Remaining Contribution (Years)	Category Grading	Remove/Part Remove/Retain	RPA Radius (m)
W025	A Group	to 18	to 400	4.5	n/a	n/a	SM-EM	Good	Unmanaged plantation on steep motorway embankment, dense mixture of planted and self-set trees (Scots pine and birch prominent, frequent Western hemlock, occasional sycamore, oak) at 1-2m spacing, and dense rhododendron understorey with some gorse; screening and softening value	No works presently required	20+	B2/3	PRG	4.8
W026	not used													
W027	A Woodland	16	350	3.5	N/A	N/A	SM-EM	Fair to good	Coniferous dominated woodland. Abundant Scots pine, SM-EM. Occasional silver birch. Recently thinned. 5no. Stems per 10m2. Bracken established in understorey. Brash scattered in places. Some standing dead stems. Young silver birch in understorey. Rare rhododendron pocket. Occasional SM common oak within woodland. Relatively uniform height. Occasional standing water	No works presently required	40+	B2	PRG	4.5
W028	A Woodland	17	408	6.0	N/A	N/A	SM-EM	Fair to good	Broadleaf dominated section of woodland. Linking coniferous dominated woodland. Recently thinned. Bracken understorey, ride through centre Oak and birch abundant. Young to early mature. Occasional Scots pine. Rare Hawthorn. Undulating topography. 4trees per 10m2.	No works presently required	40+	B2	PRG	4.8
W029	A Woodland	26	400	4.5	N/A	N/A	SM-EM	Good	Conifer dominated. Abundant Scots pine. Occasional birch. Rare sweet chestnut. 5per 10m2.	No works presently required	40+	A2	PRG	4.8
W030	A Woodland	26	400	4.5	N/A	N/A	SM-EM	Good	Conifer dominated. Abundant Scots pine. Occasional birch. Rare sweet chestnut. 5per 10m2.	No works presently required	40+	A2	PRG	4.8
W031	A Woodland	18	450 to 700	6.0	N/A	N/A	SM-M	Good	Conifer dominated. 6no. Stems per 10m2. Abundant Scots pine. Occasional birch. Bracken understorey. Occasional young oak. Young birch understorey.	No works presently required	40+	B2	PRG	8.4
W032	A Woodland	20	550	5.0	N/A	N/A	EM-M	Good	Conifer dominated. Abundant scots pine. Rare sweet chestnut. Frequent dense silver birch pockets. Occasional oak. Bracken understorey	No works presently required	40+	B2	PRG	6.0
W033	A Woodland	20	550	5.0	N/A	N/A	SM-EM	Good	Mixed broadleaf, rare pine. Wet ground in places. Alder and birch abundant. Frequent oak. 6no. Stems per 10m2	No works presently required	40+	B2	PRG	6.0
W034	A Woodland	18	250 to 500	5.0	N/A	N/A	Y-M	Good	7no. Trees Per 10m2. Birch abundant. Oak frequent. Occasional pine.	No works presently required	20+	B2	PRG	6.0
W035	A Woodland	17	350	4.0	N/A	N/A	SM	Good	Mixed woodland. Birch abundant. 6no.trees per 10m2. Frequent pine. Bracken understorey.	No works presently required	20+	B2	PRG	4.5

# Appendix C. Tree Protection Plans 9.31

## C.1 Tree Protection Plan Figure 9.31 (provided separately)

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**LEGEND**

2

VETERAN TREE SURVEY AND/OR TREE PROTECTION SHOWN IN THIS AREA. ONLY THESE HIGHLIGHTED SHEETS ARE PROVIDED FOR THE PURPOSE OF WORKS IDENTIFIED.

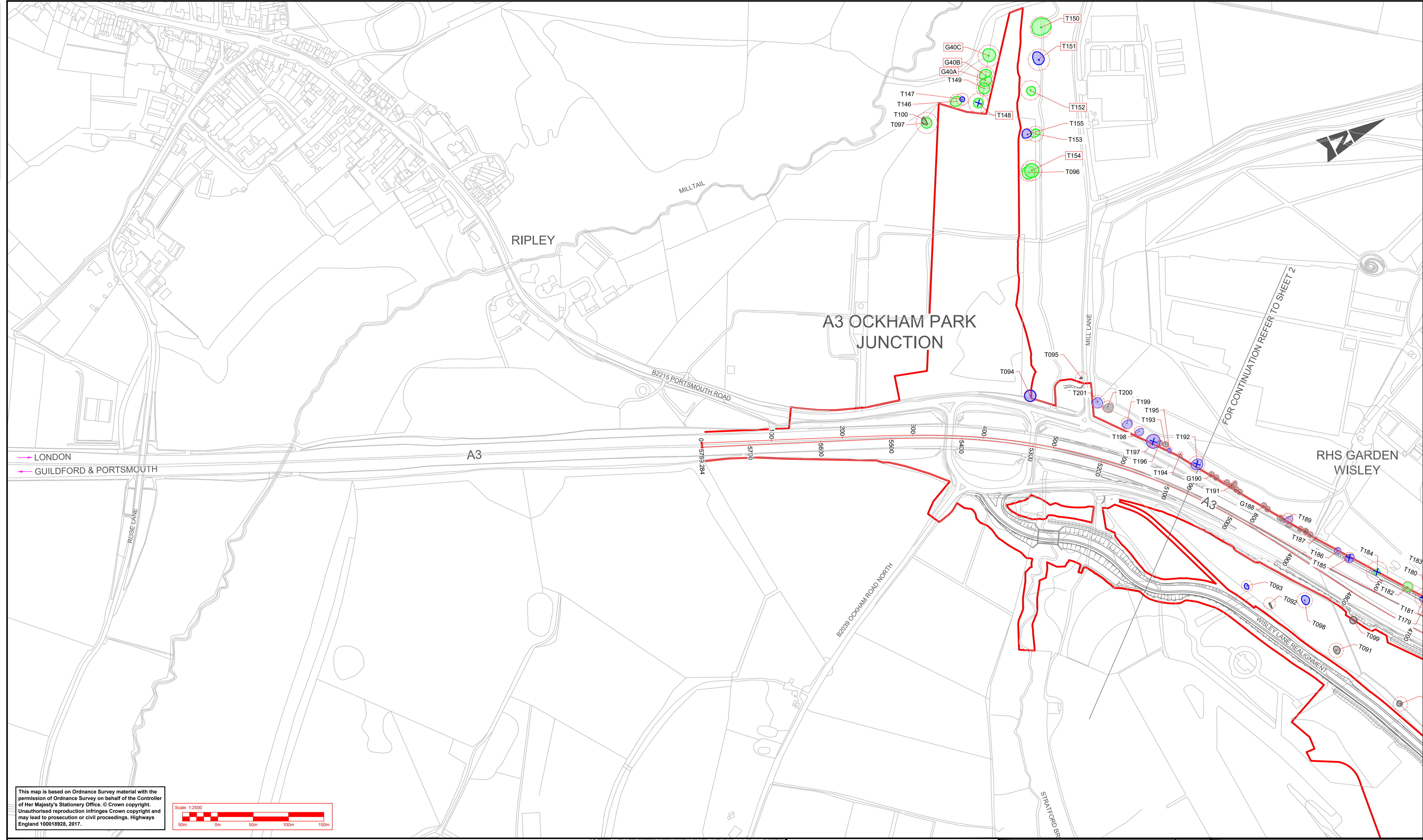
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  Atkins Limited (2018)		
Project: HE551522 - ATK - ELS - XX_KP - DR - LL - 000001		
Client	Originator	Volume
Working on behalf of	ATK	ELS
Project Ref. No. 5158141	Sheet 1 of 1	Rev. P01.1

Drawing Title			
FIGURE 7.7 VETERAN, NOTABLE AND TPO TREES TREE PROTECTION PLAN KEY PLAN			
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Rev: P01.1			

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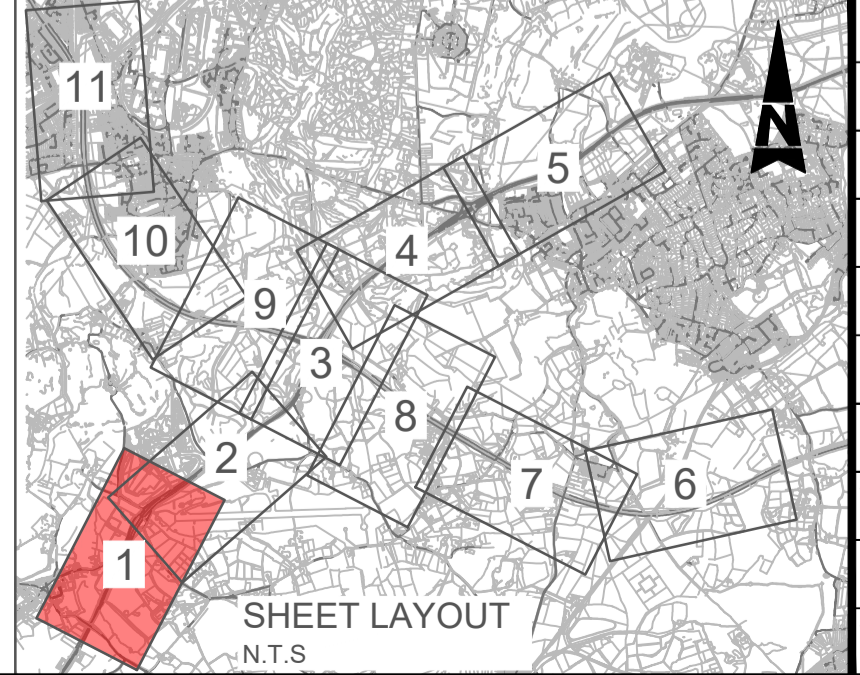


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**KEY:**

- CATEGORY A TREE
- CATEGORY B TREE
- CATEGORY C TREE
- CATEGORY U TREE
- ROOT PROTECTION AREA
- TREE ID
- VETERAN / ANCIENT TREE
- TPO SINGLE TREE
- TPO AREAS
- POTENTIAL REMOVAL / IMPACT
- TO BE REMOVED
- DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY



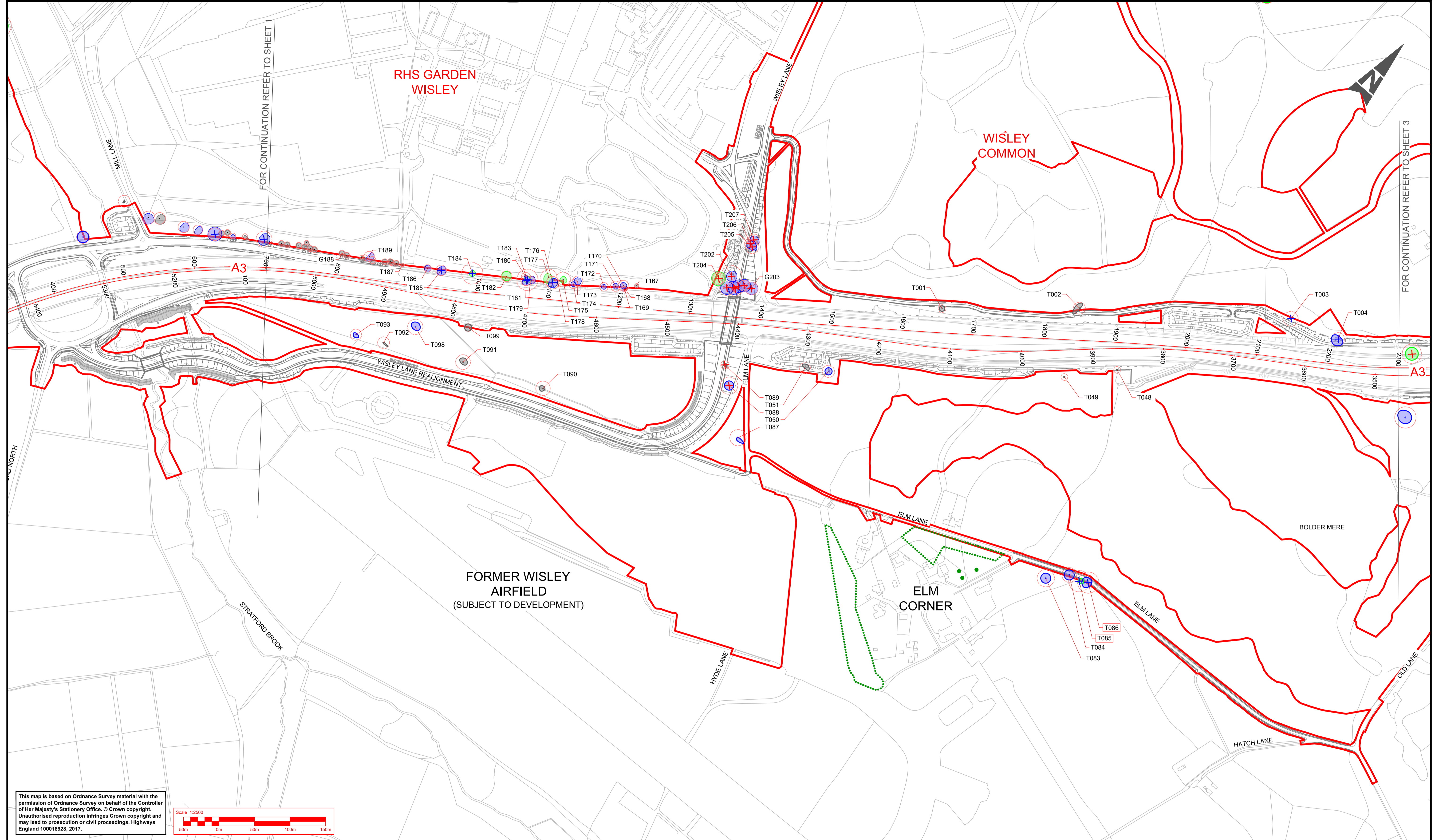
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Additional survey added	S0	Revision P01.3	---	---	---	---	---

Drawing Suitability <b>WORK IN PROGRESS</b>	Status <b>S0</b>	Project Title <b>M25 junction 10/A3 Wisley interchange</b>
Atkins SNC-LAVALIN Epsom Gateway Ashley Avenue Epsom Surrey KT18 5AL Tel: +44 (0)1372 726140 Fax: +44 (0)1372 740055 www.atkinsglobal.com	Drawing Title <b>VETERAN, NOTABLE AND TPO TREES TREE PROTECTION PLAN SHEET 1 OF 8</b>	
Client highways england	Drawing Number <b>HE551522</b>	Project <b>ATK - ELS - A3_ML - DR - LL - 000001</b>
Copyright © Atkins Limited (2018)	Original Size: <b>A1</b>	Scale: 1:2500 Project Ref. No: 5158141 Sheet: 1 of 11 Rev: <b>P01.3</b>

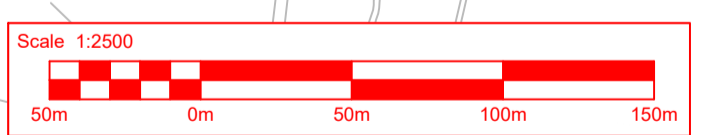
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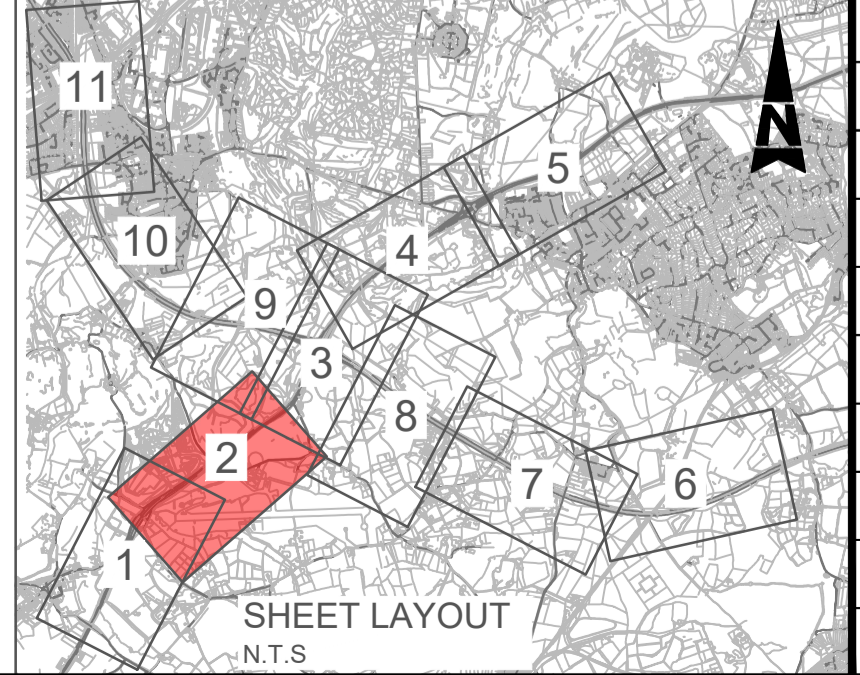


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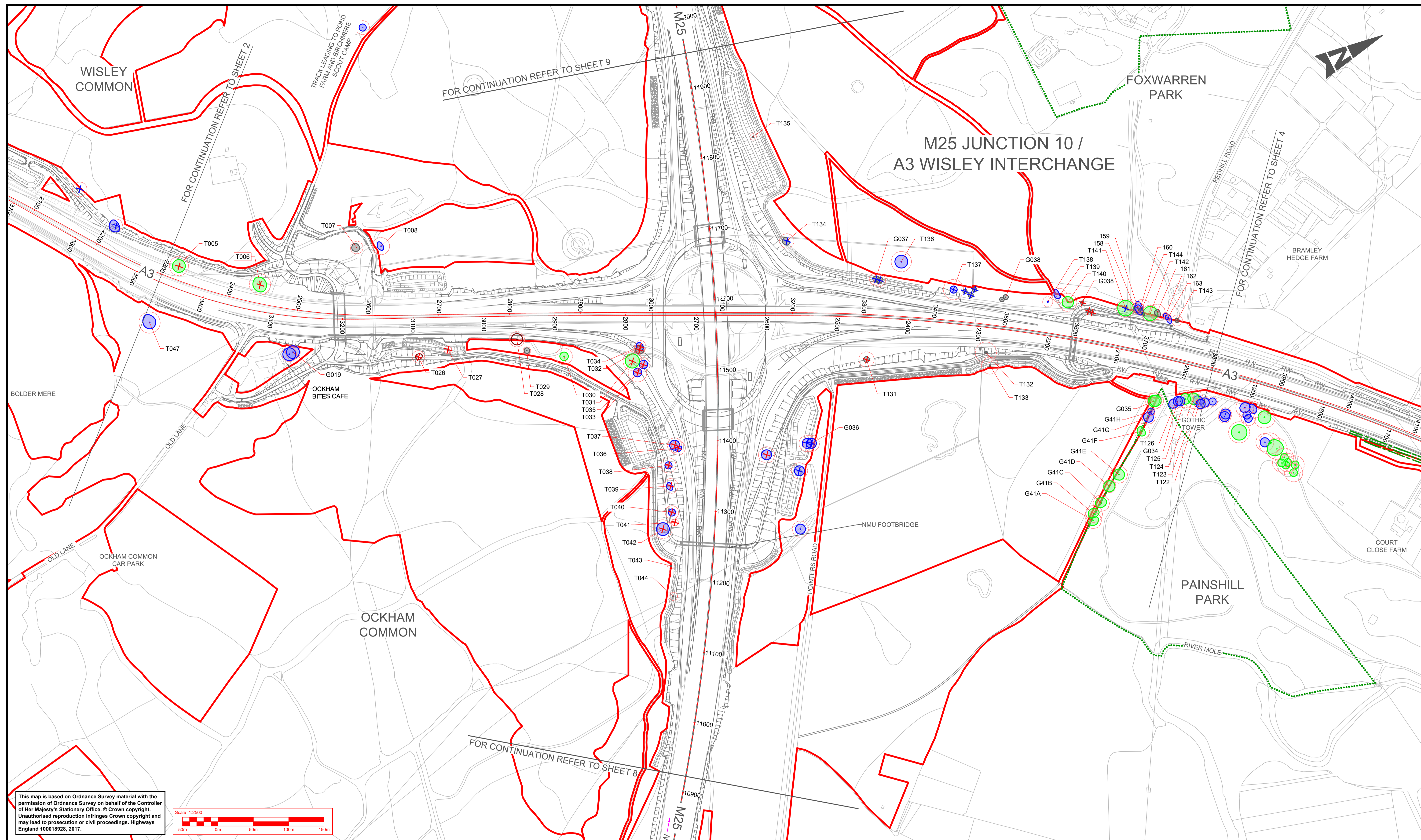
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- CATEGORY U TREE
- ROOT PROTECTION AREA
- T022 TREE ID
- VETERAN / ANCIENT TREE
- TPO SINGLE TREE
- TPO AREAS
- POTENTIAL REMOVAL / IMPACT
- TO BE REMOVED
- DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY



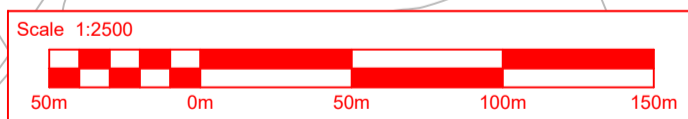
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Drawing Suitability	WORK IN PROGRESS	Status	S0	Project Title	M25 junction 10/A3 Wisley interchange
Atkins Epsom Gateway Ashley Avenue Epsom Surrey KT18 5AL Tel: +44 (0)1372 726140 Fax: +44 (0)1372 740055 www.atkinsglobal.com		Drawing Title <b>VETERAN, NOTABLE AND TPO TREES            TREE PROTECTION PLAN            SHEET 2 OF 8</b>			
Client	Working on behalf of highways england			Drawing Number	HE551522
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				Project Ref. No.	5158141
				Sheet	2 of 11
				Rev	P01.3

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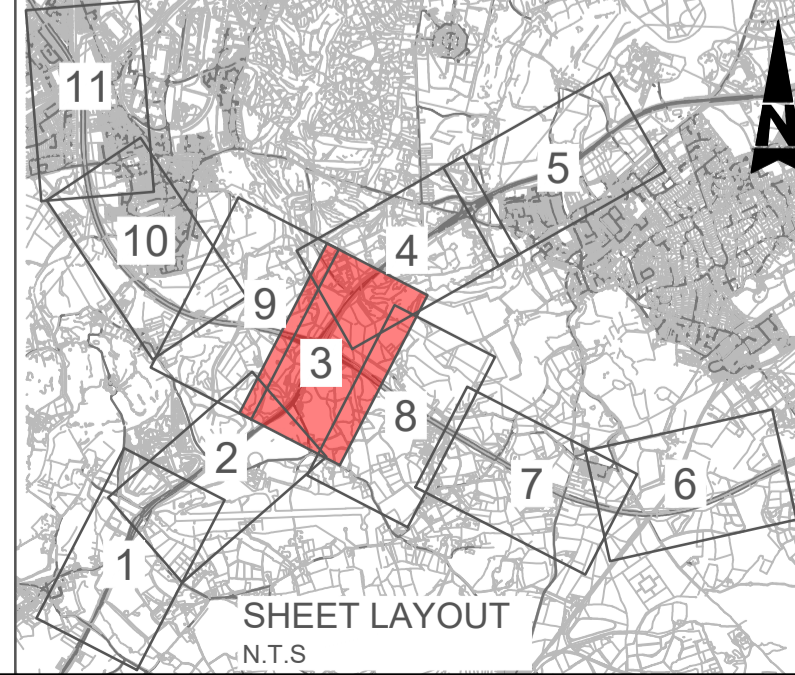


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**KEY:**

	CATEGORY A TREE		T022	TREE ID		DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
	CATEGORY B TREE		XXXX	VETERAN / ANCIENT TREE		TPO SINGLE TREE
	CATEGORY C TREE			TPO AREAS		POTENTIAL REMOVAL / IMPACT
	CATEGORY U TREE			TO BE REMOVED		
	ROOT PROTECTION AREA					

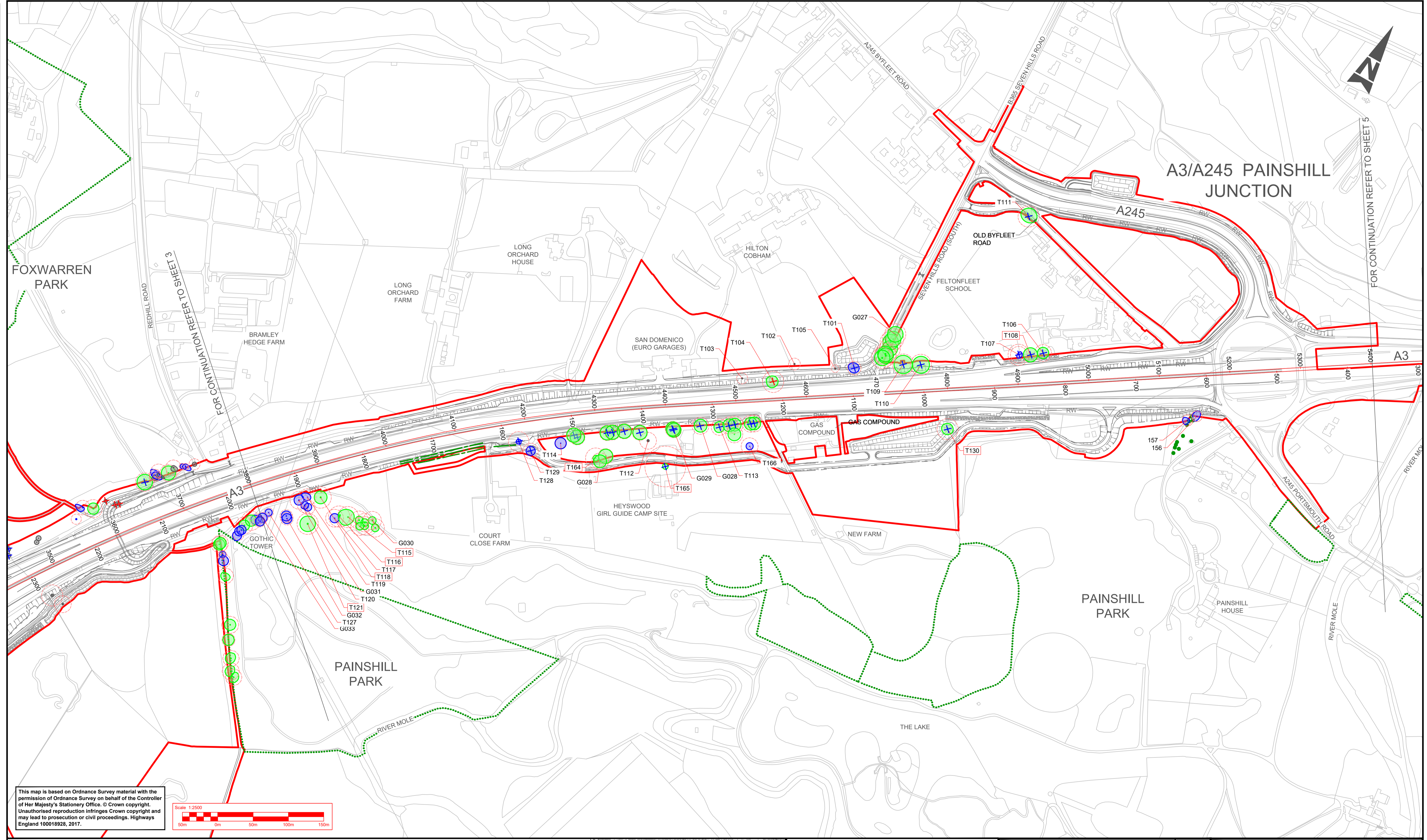


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Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
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Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date

Drawing Suitability	WORK IN PROGRESS	Status	S0	Project Title	M25 junction 10/A3 Wisley interchange
Atkins Epsom Gateway Ashley Avenue Epsom Surrey KT18 5AL Tel: +44 (0)1372 726140 Fax: +44 (0)1372 740055 www.atkinsglobal.com		<b>VETERAN, NOTABLE AND TPO TREES TREE PROTECTION PLAN SHEET 3 OF 8</b>			
Client	Working on behalf of	Drawing Number	HE551522	Originator	ATK
		Project	A3_ML	Volume	ELS
		Location		Type	DR - LL
		Original Size	A1	Scale	1:2500
		Project Ref. No.	5158141	Sheet	3 of 11
				Rev.	P01.3



DO NOT SCALE  
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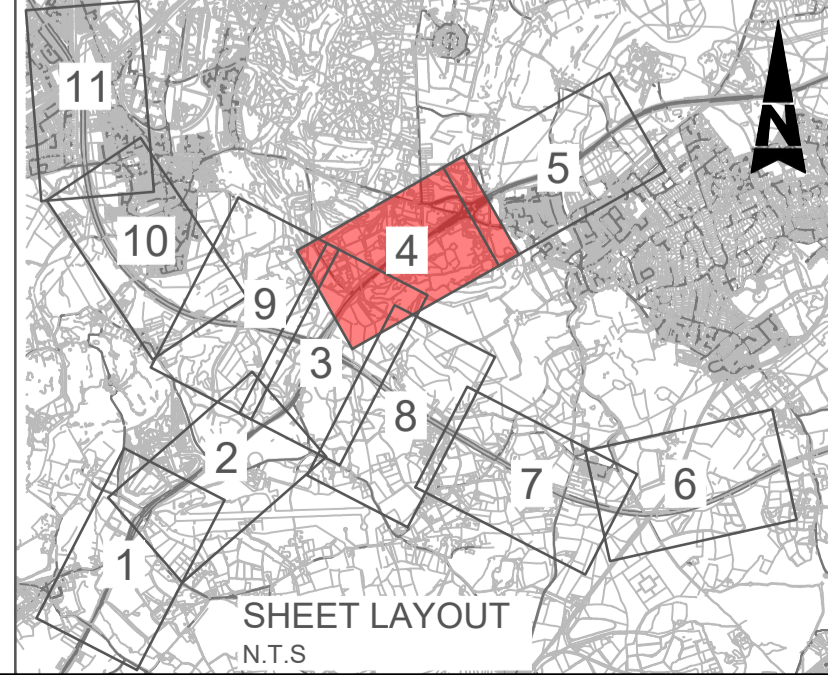


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**KEY:**

	CATEGORY A TREE		T022	TREE ID		DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
	CATEGORY B TREE		XXXX	VETERAN / ANCIENT TREE		TPO SINGLE TREE
	CATEGORY C TREE			TPO AREAS		POTENTIAL REMOVAL / IMPACT
	CATEGORY U TREE			TO BE REMOVED		
	ROOT PROTECTION AREA					



Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description							
Description							
Description							
Description							
Description Additional survey added	S0	Revision P01.3	Drawn ---	Checked ---	Reviewed ---	Authorised ---	Issue Date ---

Drawing Suitability: WORK IN PROGRESS  
 Status: S0

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**highways england**

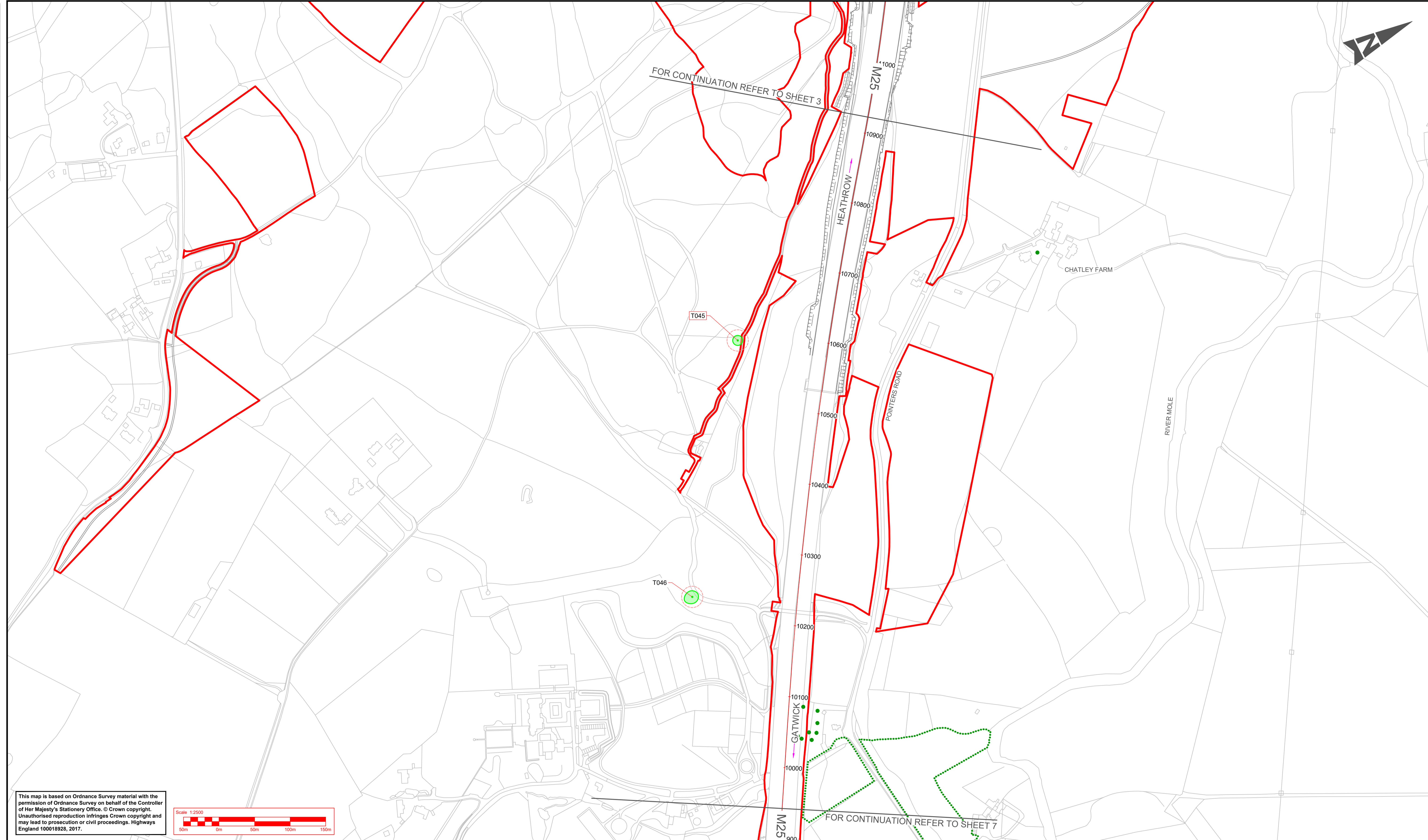
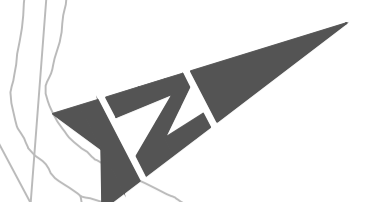
Project Title: M25 junction 10/A3 Wisley interchange

Drawing Title: VETERAN, NOTABLE AND TPO TREES TREE PROTECTION PLAN SHEET 4 OF 8

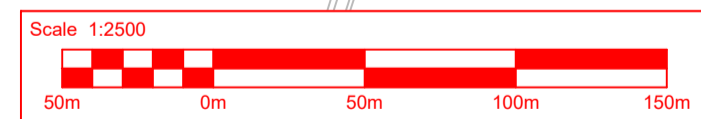
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 Originator: ATK  
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 Type: DR-LL-000004  
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 Sheet: 4 of 11  
 Rev: P01.3

DO NOT SCALE

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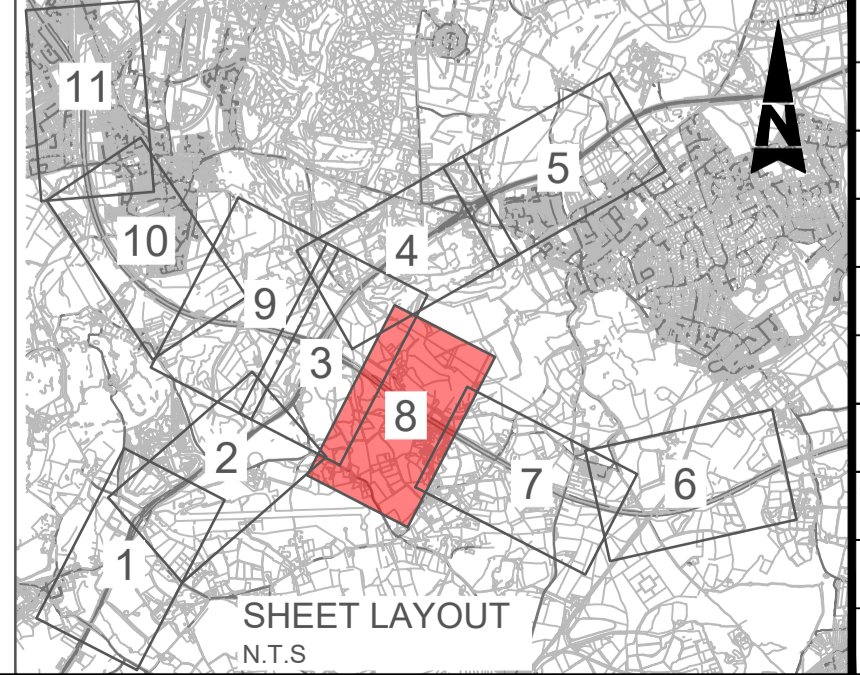


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**KEY:**

	CATEGORY A TREE		T022	TREE ID		DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY
	CATEGORY B TREE		XXXX	VETERAN / ANCIENT TREE		
	CATEGORY C TREE			TPO SINGLE TREE		
	CATEGORY U TREE			TPO AREAS		
	ROOT PROTECTION AREA			POTENTIAL REMOVAL / IMPACT		
				TO BE REMOVED		



Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
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Description							
Description							
Description							
Description Additional survey added	S0	P01.3					

Drawing Suitability: **WORK IN PROGRESS**      Status: **S0**

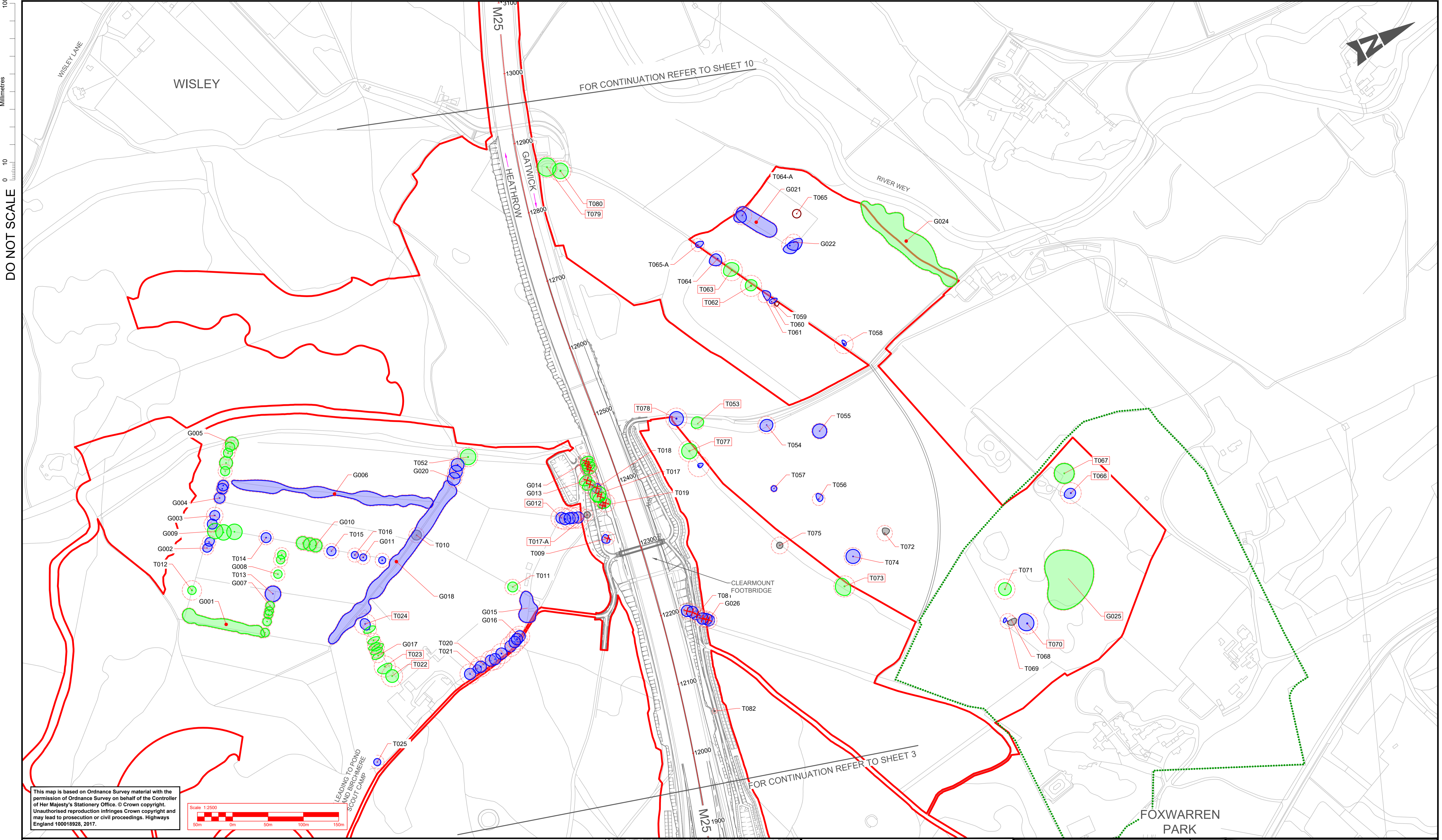
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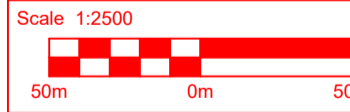
Client: **Working on behalf of highways england**

Project Title	<b>M25 junction 10/A3 Wisley interchange</b>		
Drawing Title	<b>VETERAN, NOTABLE AND TPO TREES TREE PROTECTION PLAN SHEET 8 OF 8</b>		
Drawing Number	Project	Originator	Volume
HE551522	M25_ML	- ATK -	ELS -
Location	Type	Role	Number
Original Size	Scale	Project Ref. No.	Sheet
A1	1:2500	5158141	8 of 11
Plotted	By	Rev	
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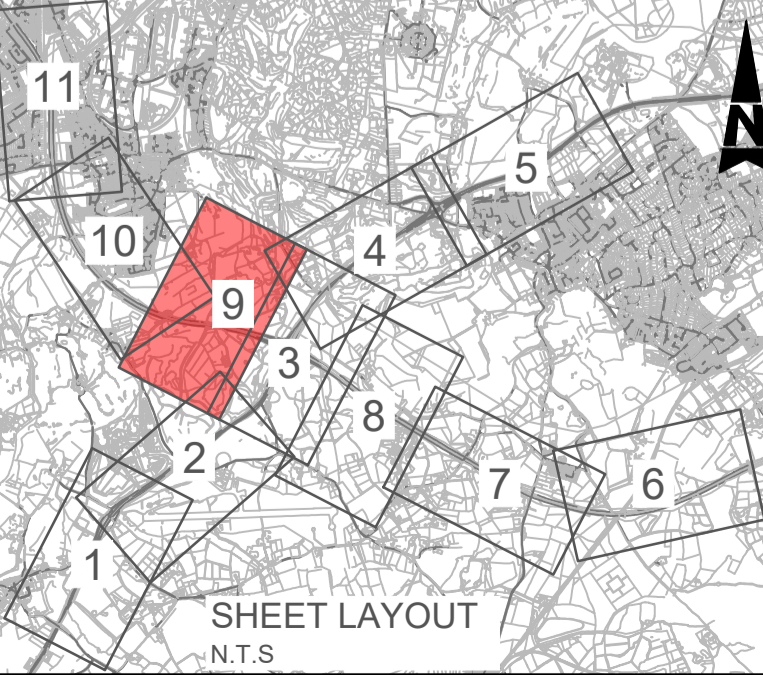


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**KEY:**

- CATEGORY A TREE
- CATEGORY B TREE
- CATEGORY C TREE
- CATEGORY U TREE
- ROOT PROTECTION AREA
- T022 TREE ID
- XXXX VETERAN / ANCIENT TREE
- TPO SINGLE TREE
- ⋯⋯⋯ TPO AREAS
- X POTENTIAL REMOVAL / IMPACT
- X TO BE REMOVED
- DEVELOPMENT CONSENT ORDER (DCO) BOUNDARY



Description	Status	Revision	Drawn	Checked	Reviewed	Authorised	Issue Date
Description							
Description							
Description							
Description							
Additional survey added	S0	Revision P01.3	Drawn ---	Checked ---	Reviewed ---	Authorised ---	Issue Date ---

Drawing Suitability: WORK IN PROGRESS		Status: S0	Project Title: M25 junction 10/A3 Wisley interchange	
 Epsom Gateway Ashley Avenue Epsom Surrey KT18 5AL Tel: +44 (0)1372 726140 Fax: +44 (0)1372 740055 www.atkinglobal.com		Drawing Title: <b>VETERAN, NOTABLE AND TPO TREES          TREE PROTECTION PLAN</b>		
Copyright © Atkins Limited (2018)			Drawing Number: HE551522 Project: M25_ML Originator: ATK Volume: ELS Type: DR Role: LL Number: 000009	
Client: Working on behalf of			Original Size: A1 Scale: 1:2500 Project Ref. No.: 5158141 Sheet: 9 of 11 Rev: P01.3	

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