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Outline Veteran Tree Strategy

Officers' Meadows

Chelmsford Road

Shenfield

Essex

September 2023

Ref. SJA vtr 23054-01a

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1. Tree Survey Schedule (SJA vtss 22579-01)
2. Veteran Tree Location plan (SJA VTL 23054-031)

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1. INTRODUCTION

1.1. Instructions

1.1.1. SJAtrees has been instructed by Croudace Homes to visit Officers Meadows, Chelmsford Road, Shenfield and to prepare this 'veteran tree strategy'. This veteran tree strategy refers to English oak tree no. 151, as this is the only veteran tree identified on this site.

1.1.2. The tree is identified within the tree survey schedule and the veteran tree location plan at **Appendices 1 and 2**.

1.2. Site inspection

1.2.1. The wider application site was subject to a visit and tree inspection that were undertaken by Nigel Kirby and Tom Southgate of SJAtrees, between Tuesday 6th and Thursday 8th December 2022. Weather conditions at the time were clear, dry and bright. Deciduous trees were in partial leaf. Nigel Kirby undertook the veteran tree inspection during the period outlined above.

1.3. Site description

1.3.1. The Officers Meadows site is comprised of four agricultural fields with vegetative (hedgerow, tree belt and woodland) boundaries arranged in an irregular polygon with a roughly triangular shape, as shown in **Figure 1** below. The north boundary of the site is formed by Chelmsford Road (A1023) and the residential properties associated with the road. The southwest boundary adjoins the playing fields of Shenfield School and Alexander Lane and the southeast boundary adjoins tree belts and woodland with the railways beyond.



Figure 1: Site location shown on Google aerial image

1.3.2. The topography of the site reaches a plateau at 63.5m OD in the northern section of the site, the ground then falls away in all directions, but more steeply towards the field boundary ditch to the south (57.4m OD). The land rises from the ditch to Alexander Road.

1.4. Soil type

1.4.1. The British Geological Survey Solid and Drift Geology map of the area indicates the site overlies superficial deposits of head and alluvium deposits (clay, silt, sand and gravel) above a bedrock of London Clay Formation (clay, silt and sand). Borehole records associated with the A12 to the north of site identify a sandy clay and a further record adjacent to Alexander Lane identifies a sandy silty clay becoming a stiff orange and grey silty, sandy clay.

1.4.2. The Magic Map application highlights that the local soil scape is a slowly permeable, seasonally wet, slightly acid but base-rich loamy and clayey soil with impeded drainage.

1.4.3. We are not aware of a site investigation or soil analysis having been undertaken; but the indications of the British Geological Survey map suggest that the soil is likely to be susceptible to compaction.

1.5. Statutory and non-statutory information

1.5.1. The veteran oak no. 151 is covered by the Brentwood Borough Council TPO no. 27/96 and is listed as T7 in the TPO schedule and plan.

1.5.2. Although trees designated as ancient or veteran trees are not protected directly by legislation, the habitats which they provide to European protected species, such as bats, are covered by the Habitats Directive and other species are protected by the Wildlife and Countryside Act, 1981. The Natural Environment and Rural Communities (NERC) Act, 2006, requires all public bodies to have regard to biodiversity conservation when carrying out their duties.

1.5.3. The contribution that veteran trees make to biodiversity is important because of the unique habitat that they provide to both flora and fauna, in particular the importance of continuity of dead wood habitat they provide to saproxylic invertebrates (insects which live in dead or decaying wood) and the habitat that they provide to protected species such as bats.

1.5.4. The veteran oak is not included in the Woodland Trust Ancient Tree Inventory², but it does display attributes consistent with it being 'Veteran'. Ancient and veteran trees are considered to be irreplaceable habitats, and contribute to a site's biodiversity, cultural and heritage value, and the National Planning Policy Framework (see below) states that development resulting in the loss or deterioration of ancient or veteran trees should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists. Current government guidance states that ancient or veteran trees should be protected from root damage by inclusion of a buffer zone at least 15 times larger than the diameter of the trunk, or 5m from the edge of the tree's canopy if that area is larger.

² <https://ati.woodlandtrust.org.uk/>

2. AIMS AND OBJECTIVES

2.1. Aims

2.1.1. The principal aim of this veteran tree strategy is to secure the adoption of a strategic and integrated approach to the management and maintenance of the existing veteran oak no. 151 on the site. Thus ensuring its retention and successful integration into the landscape and environment of the site, post development.

2.2. Specific objectives

2.2.1. The objectives of this strategy are as follows:

- to take appropriate measures to safeguard or improve the structural integrity of the tree to minimise the risk of life-shortening structural failure;
- to safeguard or improve the structural integrity of the tree to minimise the risk of structural failure and consequent risk of harm to people or property;
- to protect the tree from avoidable damage;
- to enhance the tree's vitality and physiological condition;
- to protect the soil in which the tree is growing;
- to protect the habitats the tree provides;
- to protect and enhance surrounding vegetation that may provide nectar or pollen sources essential to birds or insects using these habitats; and
- to provide a mechanism for monitoring and reviewing the implementation of the veteran tree strategy.

3. THE TREE

3.1. Preliminary survey findings

3.1.1. The Ordnance Survey map of 1871 to 1873 (see **Figure 2** below) shows the existing redline boundary, ancient woodland area and the veteran oak overlaid onto the OS plan. The existing location of the veteran oak appears to correspond with an individual tree in the OS plan, which demonstrates that the specimen was old enough to have been in existence at that time.



Figure 2: Ordnance survey map of 1871 to 1873 published 1881 showing location of veteran oak no. 151 and the ancient woodland in the east section of the site

3.2. Veteran oak no. 151

3.2.1. The veteran English oak no. 151 is growing within the field boundary hedgerow that separates the central rectangular field and the northern field. The hedgerow is comprised of predominantly dense bramble thicket with scrub growth with scattered individual trees (three established oaks (nos. 151, 153 and 154) and a small goat willow no. 152). The undergrowth beneath the veteran tree is limited to dense bramble. This is illustrated in **Photograph 1** below.



Photograph 1: view of the tree from the south-east

3.2.2. The veteran tree has a trunk diameter of 1320mm and is 14m tall. The canopy is 'maiden' with an irregular canopy shape as a result of canopy retrenchment and loss of large diameter lateral branches (maximum crown spread of 11.5m to the south).

3.2.3. Whilst a range of reference material is available to assist in recognising the significance of ancient and veteran trees and how to protect them, no published document provides a definitive and comprehensive definition of the terms 'ancient' and 'veteran' when referred to trees. Indeed, this is probably unachievable because the

terms are, to some extent, subjective. However, Lonsdale³ dedicates an entire section of his book to doing just that and comes the closest to doing so (in our opinion) in all the available literature.

3.2.4. Lonsdale's definition of the term 'veteran' and the one that SJA trees ascribes to is summarised as: **"Veteran: this term describes a tree that has survived various rigours of life and thereby shows signs of ancientness, irrespective of its age. In order to qualify as a veteran, the tree should show crown retrenchment and signs of decay in the trunk, branches or roots, such as exposed dead wood or fungal fruit bodies"**. We have found that many other attempts to identify veteran trees omit the vital, in our view, element identified by Lonsdale, that being 'crown retrenchment'.

3.2.5. Crown retrenchment, due to age, is believed to result from a combination of physiological and biomechanical changes associated with growth and ageing. Biomechanical changes could be as a result of increasing leverage and or the increasing effects of wood decay. Physiological changes could comprise a wide range of factors including increasing distances between absorptive roots and shoot tips; the progressive reduction in the length of shoot extension growth; or increasing resistance to water flow that may occur with increasingly narrow sapwood increments around a very large stem.

3.2.6. This tree, as can be seen in **Photograph 1** above, appears to have had previously developed a broad spreading crown but much of its upper canopy is dying back or is dead. However, the presence of the healthy growth in the tree's inner canopy demonstrates the presence of newer and more vigorous hydrostatic pathways. It can be expected that the outer canopy will continue to decline but that the inner canopy will continue to develop a second canopy and this will probably result in a hollow trunk; thus epitomising 'retrenchment'. In time, this tree has the potential to become a truly ancient specimen.

3.2.7. The tree is located on gently sloped ground from 60.5m OD to the north-east to 59.5m OD to the south-west. The trunk is growing on the south side of a field

³ Ancient and other veteran trees: further guidance on management' by David Lonsdale and published by The Ancient Tree Forum and The Woodland Trust in 2013

boundary ditch. The fields display evidence of regular ploughing, which will have disrupted the root environment of the ploughed soil and resulting in compaction of the sub-soil. Consequently, we consider it likely that the specimen has preferentially rooted to the east and west along the field boundary features with reduced rooting extents and volumes growing to the north and south.

4. THREATS

4.1. The proposed development

4.1.1. Within the proposed development the veteran oak no. 151 is to be situated in an area of open space bounded by roads to the north, west and south. The construction of the roads is likely to result in some disturbance within the periphery of the tree's buffer zone but this is considered minor and is discussed in further detail in the arboricultural impact report (SJA air 22579-01).

4.1.2. The 'raised table' portion of the primary road to the south abuts the veteran buffer zone. A secondary road adjoins the primary to the west of the oak and then runs along the north-west edge of the buffer zone on that. The closest dwellings are 25m from the trunk to the north-west and 32m to the south and east.

4.1.3. These associated construction activities and the machinery required to undertake the works pose a risk of direct harm occurring to the tree (for example root severance or mechanical damage to the trees' trunks or lower limbs) or indirect harm occurring (for example compaction of the soil, reduced rooting area, impoverished soils leading to a reduction in the availability to roots of water, oxygen or nutrients).

4.2. Part or whole tree failure

4.2.1. Whilst the oak has a cavity between the northeast buttress roots and a basal wound on the north trunk base, the defects are not extensive and will not significantly reduce the structural condition of the trunk. The lack of visible fungal fruiting bodies, significant decay at the base, and the large diameter of trunk suggests that there is no heightened likelihood of entire tree failure which would require remedial action.

4.2.2. The individual long extended lower limbs growing to the southeast and tall, slender limbs in the upper canopy are at increased risk of failure due to a longer lever arm with limited side branches to dissipate wind loading forces and lack of sheltering surrounding canopy. Furthermore, the below average physiological condition and old age of the specimen limits the ability of the tree to produce response wood to strengthen the limbs and their unions. The susceptibility of the specimen to large limb failure is corroborated by the presence of historically failed large diameter limbs in the lower canopy.

4.3. Pests and disease

4.3.1. There are many pests and diseases which are pathogenic to mature oaks; however, none were evident during the tree inspection dated December 2022. Some of the potential pests or diseases that could be present might be acting parasitically (living on host without causing death) or saprophytically (deriving nutrients from the dead organic material), decaying the exposed internal wood and numerous deadwood habitats within many of the tree's branches.

4.4. Soil Hydrology

4.4.1. The existing ground conditions within the veteran buffer zone are to be retained in-situ and unaltered; however, the introduction of the road network, school site and dwellings could alter the hydrology of the surrounding soil. Furthermore, the stopping up of the ditch adjacent to the tree's trunk at a position remote from the buffer zone might also impact hydrology.

4.5. Soil compaction

4.5.1. Increased foot traffic and trampling of soil could cause compaction of the soil leading to a reduction in the trees' physiological condition and subsequently, an increase in the risk posed by falling dead wood or limb failure.

4.6. Climate change

4.6.1. The climate is predicted to get warmer in the next thirty years, with the likelihood of hotter summers, cooler, wetter winters and more frequent storm events. Any change in the prevalent climate could have an adverse effect on these trees; in particular, the storm events may increase the likelihood of issues arising with the structural integrity of dead, dying or exposed stems and branches.

4.6.2. As the climate warms, the significance of carbon sequestration increases, as this reduces the levels of CO₂ in the atmosphere. The extent of carbon sequestered and stored by trees is dependent on species, age and size and large veteran oaks tend to sequester more carbon annually than almost any other trees in the UK. Consequently, the physical deterioration, structural collapse, removal or death of these trees would have a significant negative impact on localised carbon sequestration.

4.7. Increase in public access

4.7.1. The introduction of a road network, school site and residential development has the potential to significantly increase the level of public access. The fact that the oak is a relatively large specimen located at a focal point along the primary road may arouse the interest of passers-by and may result in many wanting a closer look at it. An increased risk of failure and increased access to the area by the public greatly increases the risk of harm occurring and could lead to detrimental and disfiguring remedial pruning.

4.7.2. Another risk associated with public access is that of vandalism. Patches of bark could be removed, and any fire lit in the vicinity of a veteran or notable tree could be very harmful, especially if lit within or close to the trunks.

4.8. Protection of habitats

4.8.1. Further information is required to identify the habitats which the English oak may offer to any protected or red data list species. Future survey work to identify measures to promote the quality and longevity of these habitats could be carried out by an ecologist.

4.9. Pollution

4.9.1. As the tree is located within open space bound by roads, there is a potential for pollution or raised nitrate levels to affect the tree. Furthermore, the increased footfall adjacent to the tree increases the risk of invasive species such as Japanese knotweed that could colonise the ground around the base of the tree.

5. THREAT MITIGATION & MANAGEMENT RECOMMENDATIONS

5.1. Management in the context of development

5.1.1. Full details of any proposed structures abutting or encroaching within the buffer zone and how their construction will be managed to minimise the potential harm to the tree will be the subject of a detailed arboricultural method statement secured by a suitably worded planning condition. In principle, the impacts, as discussed in the arboricultural implications report (SJA air 22579-01) submitted in support of the planning application are negligible and readily mitigated. The method statement will address the management of the trees in the context of the proposed development.

5.2. Part or whole tree failure

5.2.1. The risks associated with branch or whole tree failure, including any pests and disease issues, are mitigated by the following measures:

- a) all roads and dwellings are outside of the fall zone of the tree;
- b) the introduction of permanent fencing around the buffer zone; and
- c) incorporating wildflower meadow or native scrub within the buffer zone to discourage trampling.

5.2.2. Ensuring no property or publicly accessible areas are within the fall zone of the tree significantly reduces the 'target' value in and future tree risk assessments.

5.2.3. The residual risk of public access underneath the canopy or within the fall zone will be managed by the introduction of a fence enclosing the veteran tree and incorporating aesthetic planting to dissuade *ad hoc* or unauthorised access.

5.2.4. Following the implementation of these measures, the occupancy rate will be low; and therefore, a high tolerance can be given to any defect that could result in hazardous tree failures. This will allow the retention of veteran features such as failed limbs or large diameter deadwood habitat.

5.2.5. Ongoing monitoring and inspection of the veteran will inform any necessary remedial action for arboricultural management reasons with the aim of prolonging the veteran's life expectancy.

5.3. Hydrology

5.3.1. As outlined in 3.4. the ground slopes gently from the north-east to south-west; therefore, the catchment area to the north-east is the most sensitive area for potential alterations to soil hydrology. Alteration to the land use in this area could disrupt the existing surface water runoff and ground water flow that feeds into the root system of the oak. The proposals incorporate a school site in this location, and the oak's catchment is to be retained as soft landscape, so the hydrology of the oak is not likely to be significantly changed.

5.3.2. Notwithstanding the above, the introduction of hard surface, drainage systems and houses could still result in appreciable levels of change to the local soil hydrology, which may have positive or negative impacts that cannot yet be identified. Positive effects could be a drying out of what appears to be perennially wet ground and thus reduce waterlogging and indeed benefit the tree. However, the same might end up having a detrimental effect whereby the tree relies on wetter soils.

5.3.3. Future monitoring of the trees' physiological condition over the next 10 years may identify any remedial works that will maintain the trees' long-term retention either by mulching and thus retaining moisture or possibly introducing irrigation systems.

5.4. Soil compaction and public access

5.4.1. The veteran tree will be protected from development related soil compaction by creating a construction exclusion zone with tree protection fencing and thereafter permanent fencing around the buffer zone; this will restrict access to the buffer and RPA of the oak and prevent any material storage.

5.4.2. Following the completion of construction, the tree protection fencing will be replaced with a more aesthetic fence (e.g. 1.5m tall chestnut fencing or estate railing) with a gate to allow maintenance access to align with the landscape proposals. This will ensure that no vehicles can access the buffer post development.

5.4.3. There is no intention to remove the dense bramble thicket around and near the base of the tree. Retention of existing habitats within the buffer zone is an important part of the conservation of the tree. Elsewhere within the buffer, the existing arable field areas will be planted with wildflower meadow planting to help improve the habitat potential.

5.4.4. The use of attractive meadow planting and indeed taller vegetation will naturally help reduce trampling and minimise soil compaction.

5.5. Soil environment

5.5.1. The ploughing of the fields within the tree's RPA and buffer zone will no longer be undertaken, as such, the soil environment will improve over time as the soil fauna re-distribute the soil, help to introduce organic matter and de-compact the soil. This will encourage rooting in the south and north areas of the veteran tree buffer, where rooting has likely been historically suppressed. This will provide additional resource to the specimen that could help improve its physiological health.

5.5.2. In the future, if the physiological health starts to decline options to remediating the soil can be assessed. This could include ameliorating to a deep level with a compressed air lance ('Terravent') to help alleviate any compaction and improve the level of nutrients available to the tree. Veteran trees have a long-standing relationship with the soil around them and introducing large quantities of ameliorates or disturbing the soil in an attempt to de-compact it can, in some circumstances, do more harm than good so this would only be considered as a last resort.

6. IMPLEMENTATION, MONITORING AND REVIEW

6.1. Implementation

6.1.1. The tree covered by this Outline Veteran Tree Management Strategy will be the subject of a detailed strategy and specific management schedules to be prepared at a later stage. An illustrative management schedule is shown below at **Table 1**.

Order	Timescale	Activity
1	Pre-commencement and site preparation	Arrange pre-commencement site meeting with developer's contract or site manager, the demolition contractor, the fencing/boarding contractor, the groundwork contractor(s) and the arboricultural consultant. The LPA tree officer will be invited to attend
2	Pre-commencement and site preparation	Erection of tree protection fencing and site hoarding around veteran oak no. 151
3	During construction	Ongoing and regular checks of the tree and the effectiveness of tree protection measures as part of on-going arboricultural monitoring
4	During construction	Production of a detailed veteran tree management plan, including arboricultural, ecological and landscape considerations
5	Prior to completion of development	Removal of tree protection fencing and the erection of permanent fencing around the VBZ and removal of bramble using hand tools only
6	Prior to completion of development	Planting of VTB, in accordance with the detailed veteran tree management plan
7	On completion of development	Commence annual inspection regime and fixed point photographic record of tree's physiological and structural condition and response to any management works undertaken
8	Three years after completion of development	Full review of the tree's response and adaptation to their new environment; review and update of management strategy based on conclusions drawn
9	Three years after completion to 10 years from start of development	Subject to updated management strategy, continue regular inspection regime and fixed point photographic record of tree's physiological and structural condition and response to any management works undertaken
10	10 years from commencement of development	Production of a 10 year management report for issue to the Local Planning Authority and to all other stakeholders

Table 1: Illustrative management schedule

6.1.2. An initial stakeholders' meeting will be set up to discuss objectives, prescriptions, priorities, budgets, costings and phases of the proposed veteran tree management. Management will be undertaken with professional ecological and arboricultural management advice. The roles and scopes of work of the arboriculture and ecology consultants will be set out at the initial stakeholder's' meeting, and consultants will be appointed thereafter.

6.1.3. A project manager will be appointed to be responsible for implementation of the management plan. The project manager will coordinate all management of the veteran trees during the period of the management plan, financed by a budget to be agreed with the landowner at the initial stakeholders' meeting.

6.1.4. The detailed management schedules will incorporate the management objectives set out in the detailed strategy (as outlined in this document) and give detailed specifications and work programmes. These schedules will also incorporate inspection and monitoring schedules. The plan will also clarify management responsibilities and specify what resources are required to implement them. They will be prepared in advance of annual stakeholder meetings and to be confirmed following amendment thereafter.

6.1.5. All materials, workmanship, quality and operations will be in accordance with all relevant British Standards, Codes of Practice and legislation.

6.1.6. All works undertaken to the trees or within their buffer zone will be recorded, as will details of how the trees responded to these works.

6.2. Monitoring

6.2.1. Arboricultural and habitat management works will be monitored to appraise quality and immediate effectiveness. A detailed arboricultural monitoring programme will be developed to monitor the on-going condition of the veteran and notable trees against the objectives set out. This will be undertaken on an annual basis for the first five years after initiation of the development and subject to the trees' response and adaptation to their new environment and management works undertaken, thereafter on a two-year cycle.

6.3. Review

6.3.1. The detailed veteran tree strategy will be reviewed every five years in conjunction with this monitoring programme.

APPENDIX 1

Tree Survey Schedule



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(Operations)

Veteran Tree Survey Schedule

Officers Meadows, Chelmsford Road, Brentwood

SJA tss 22579-01

December 2022

Tree Survey Schedule: Explanatory Notes

Officers Meadows, Chelmsford Road, Brentwood

This schedule is based on a tree inspection undertaken by Nigel Kirby and Tom Southgate of SJAtrees (the trading name of Simon Jones Associates Ltd.), between Tuesday the 6th and Thursday the 8th December 2022. Weather conditions at the time were clear, dry and bright. Deciduous trees were in partial leaf.

The information contained in this schedule covers only those trees that were examined, and reflects the condition of these specimens at the time of inspection. We did not have access to the trees from any adjacent properties; observations are thus confined to what was visible from within the site and from surrounding public areas.

The trees were inspected from the ground only and were not climbed, and no samples of wood, roots or fungi were taken. A full hazard or risk assessment of the trees was not undertaken, and therefore no guarantee, either expressed or implied, of their safety or stability can be given.

Trees are dynamic organisms and are subject to continual growth and change; therefore the dimensions and assessments presented in this schedule should not be relied upon in relation to any development of the site for more than twelve months from the survey date.

1. Tree no.

Given in sequential order, commencing at "1".

2. TPO no.

Number assigned to tree in the Brentwood Borough Council Tree Preservation Order no. 27/96, as shown in the TPO schedule and plan.

3. Species.

'Common names' are given, taken from MITCHELL, A. (1978) A Field Guide to the Trees of Britain and Northern Europe.

4. Height.

Estimated with the aid of a hypsometer, given in metres.

5. Trunk diameter.

Trunk diameter measured at approx. 1.5m above ground level; or where the trunk forks into separate stems between ground level and 1.5m, measured at the narrowest point beneath the fork. Given in millimetres.

6. Radial crown spread.

The linear extent of branches from the base of the trunk to the main cardinal points, rounded up to the closest half metre, unless shown otherwise. For small trees with reasonably symmetrical crowns, a single averaged figure is quoted.

7. Crown break.

Height above ground and direction of growth of first significant

8. Crown clearance.

Distance from adjacent ground level to lowest part of lowest branch, in metres.

9. Age class.

Young: Seedling, sapling or recently planted tree; not yet producing flowers or seeds; strong apical dominance.

Semi-mature: Trunk often still smooth-barked; producing flowers and/or seeds; strong apical dominance, not yet achieved ultimate height.

Mature: Apical dominance lost, tree close to ultimate height.

Over-mature: Mature, but in decline, no crown retrenchment

Veteran: Mature, with a large trunk diameter for species; but showing signs of veteranisation, irrespective of actual age, with decay or hollowing, a crown showing retrenchment and a structure characteristic of the latter stages of life.

Ancient: Beyond typical age range and with a very large trunk diameter for species; with extensive decay or hollowing, a crown that has undergone retrenchment and a structure characteristic of the latter stages of life.

10. Physiology.

Health, condition and function of the tree, in comparison to a normal specimen of its species and age.

11. Structure.

Structural condition of the tree – based on both the structure of its roots, trunk and major stems and branches, and on the presence of any structural defects or decay.

Good: No significant morphological or structural defects, and an upright and reasonably symmetrical structure.

Moderate: No significant pathological defects, but a slightly impaired morphological structure; however, not to the extent that the tree is at immediate or early risk of collapse.

Indifferent: Significant morphological or pathological defects; but these are either remediable or do not put the tree at immediate or early risk of collapse.

Poor: Significant and irremediable morphological or pathological defects, such that there may be a risk of failure or collapse.

Hazardous: Significant and irremediable morphological or pathological defects, with a risk of imminent collapse.

12. Comments.

Where appropriate comments have been made relating to:

- Health and condition
- Safety, particularly close to areas of public access
- Structure and form
- Estimated life expectancy or potential
- Visibility and impact in the local landscape

13. Category.

Based on the British Standard "Trees in relation to design, demolition and construction - Recommendations", BS 5837: 2012; adjusted to give a greater weighting to trees that contribute to the character and appearance of the local landscape, to amenity, or to arboricultural biodiversity.

Category U: Trees in such a condition that they cannot realistically be retained as living trees in the context of the current land use for longer than 10 years.

- (1) 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).
- (2) Trees that are dead or are showing signs of significant, immediate, and irreversible overall decline.
- (3) 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.

Category A: Trees of high quality with an estimated remaining life expectancy of at least 40 years.

- (1) Trees that are particularly good examples of their species, especially if rare or unusual.
- (2) Trees, groups or woodlands of particular visual importance as arboricultural and/or landscape features.
- (3) Trees, groups or woodlands of significant conservation, historical, commemorative or other value.

Category B: Trees of moderate quality with an estimated remaining life expectancy of at least 20 years.

- (1) 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 minor 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.
- (2) Trees present in numbers, usually growing as groups or woodlands, such that they form distinct landscape features, thereby attracting a higher collective rating than they might as individuals; or trees present in numbers but situated so as to make little visual contribution to the wider locality.
- (3) Trees with material conservation or other cultural value.

Category C: Trees of low quality with an estimated remaining life expectancy of at least 10 years, or young trees with a stem diameter below 150mm.

- (1) Unremarkable trees of very limited merit or of such impaired condition that they do not qualify in higher categories.
- (2) 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 landscape benefits.
- (3) Trees with no material limited conservation or other cultural value.

TREE SURVEY SCHEDULE

Officers Meadows, Chelmsford Road, Brentwood

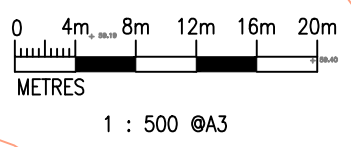
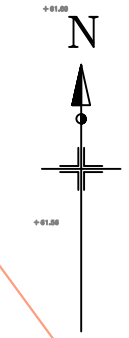
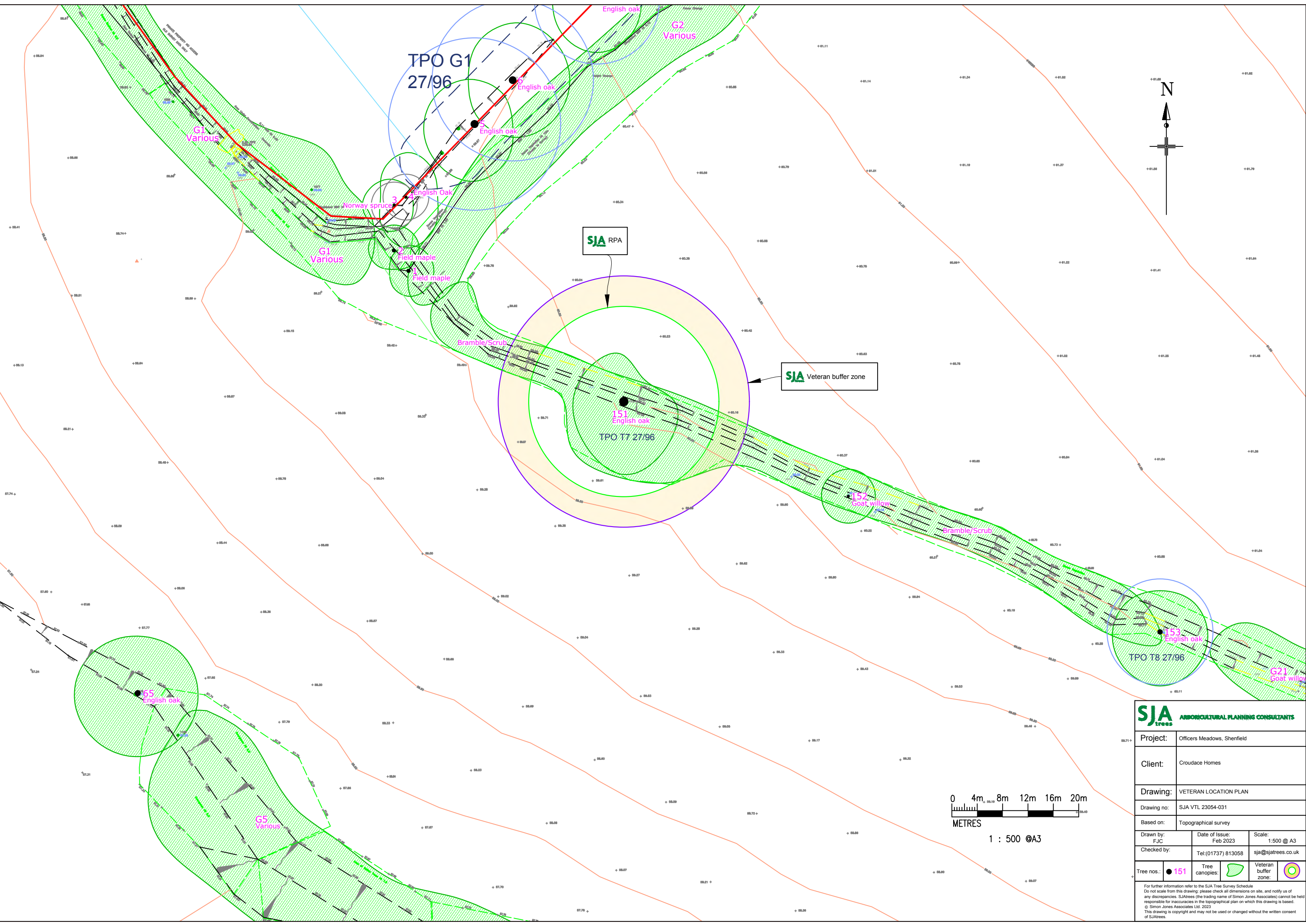
No.	TPO no.	Species	Height	Trunk diameter	Radial crown spread	Crown break	Crown clearance	Age class	Physio - logy	Structure	Comments	Category
151	T7 27/96	English oak	14m	1320mm	N 7.25m NE 4.75m E 8m S 11.5m SW 9m W 8m	3m	2.5m	Veteran	Below average	Indifferent	Located on S side of historic ditch; visual access to S side of trunk impeded by dense bramble; evidence of basal wound on N side of trunk; internal heartwood exposed; lack of prominent buttress rooting on N side; prominent buttress roots on E and S side of trunk; cavity between buttress roots on NE side at ground level; wounding on N side of trunk at ground level; internal heartwood exposed; no significant differences in tone when lower trunk sounded with acoustic mallet; single trunk; forks into multiple codominant stems at approximately 3m; evidence of large dia. low level scaffold limbs, historically failed, storm damaged and torn off; onset of lower canopy formation from retrenchment at main crown break; remaining canopy limbs, tall and draw-up; stag heading present; notably asymmetrical to SE; readily visible across open fields to N and S; in keeping with the character of the site and local area.	A (23)

Root Protection Areas (RPAs)

Root Protection Areas have been calculated in accordance with paragraph 4.6.1 of the British Standard 'Trees in relation to design, demolition and construction – Recommendations', BS 5837:2012. This is the minimum area which should be left undisturbed around each retained tree. RPAs are portrayed initially as a circle of a fixed radius from the centre of the trunk; but where there appear to be restrictions to root growth the circle is modified to reflect more accurately the likely distribution of roots.

<i>Tree No.</i>	<i>Species</i>	<i>RPA</i>	<i>RPA Radius</i>
151	English oak	706.9m ²	15.0m

APPENDIX 2
Veteran Tree Location Plan



SJA trees ARBORICULTURAL PLANNING CONSULTANTS			
Project:	Officers Meadows, Shenfield		
Client:	Croudace Homes		
Drawing:	VETERAN LOCATION PLAN		
Drawing no:	SJA VTL 23054-031		
Based on:	Topographical survey		
Drawn by:	FJC	Date of Issue:	Feb 2023
Checked by:		Tel: (01737) 813058	Scale: 1:500 @ A3
Tree nos.:	● 151	Tree canopies:	
		Veteran buffer zone:	
For further information refer to the SJA Tree Survey Schedule Do not scale from this drawing; please check all dimensions on site, and notify us of any discrepancies. SJA trees (the trading name of Simon Jones Associates) cannot be held responsible for inaccuracies in the topographical plan on which this drawing is based. © Simon Jones Associates Ltd. 2023 This drawing is copyright and may not be used or changed without the written consent of SJA trees.			