



**WOKINGHAM
BOROUGH COUNCIL**

**WOKINGHAM BOROUGH COUNCIL
TOWN AND COUNTRY PLANNING ACT 1990
(AS AMENDED)
SECTION 78 APPEAL**

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Planning Inspectorate APP/X0360/W/25/3371069

LAND NORTH OF READING ROAD

ARBORFIELD

REBUTTAL PROOF OF EVIDENCE – ARBORICULTURE

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1.0 Introduction

1.1 I provide this rebuttal proof in response to the updated Arboricultural Proof of Evidence prepared by Mr Peter Wilkins, dated February 2026 . This rebuttal should be read alongside my main Arboriculture and Landscape Proof of Evidence (CD14.04), which I maintain in full.

1.2 This rebuttal focuses only on matters that are new when compared with the earlier appellant arboricultural proof (CD13.03). Those original points are already addressed in CD14.04.

1.3 Mr Wilkins' February 2026 PoE raises several issues to which I need to respond:

- The classification of certain trees as ancient/veteran;
- The size and shape of Root Protection Areas (RPAs) and buffer zones;
- The acceptability of public access and footpaths within buffer zones / RPAs;
- The acceptability of an off-site garden within a buffer zone.
- The alleged 'beneficial' effects of the drainage strategy; and
- The effect of s278 highway works on off-site veteran or near-veteran trees.

I address each of these in turn.

2.0 Policy Framework and Irreplaceable Habitat Test

2.1 The appellant and I agree that ancient and veteran trees constitute irreplaceable habitat and that NPPF 193(c) is engaged. It states that development resulting in the loss or deterioration of irreplaceable habitats (including ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy. There is no dispute that this is a high bar.

2.2 The Standing Advice confirms that both direct and indirect impacts can cause the loss or deterioration of ancient or veteran trees:

2.3 Direct impacts include: damaging or destroying all or part of them (including their soils, ground flora or fungi); damaging roots and understorey (all the vegetation under the taller trees); damaging or compacting soil; damaging functional habitat connections, such as open habitats between the trees in wood pasture and parkland; increasing levels of air and light pollution, noise and vibration; changing the water table or drainage;

2.4 Indirect impacts include: breaking up or destroying working connections between woodlands, or ancient trees or veteran trees - affecting protected species, such as bats or wood-decay insects; reducing the amount of semi-natural habitats next to ancient woodland that provide important dispersal and feeding habitat for woodland species; reducing the resilience of the woodland or trees and making them more vulnerable to change; increasing the amount of dust, light, water, air and soil pollution; increasing disturbance to wildlife, such as noise from additional people and traffic; increasing damage to habitat, for example trampling of plants and erosion of soil by people accessing the woodland or tree root protection areas; increasing damaging activities like fly-tipping and the impact of domestic pets; increasing the risk of damage to people and property by falling branches or trees requiring tree management that could cause habitat deterioration; changing the landscape character of the area

2.5 All the above constitute “deterioration”. It is not necessary for a tree to undergo tree works or to be felled for policy harm to arise: long-term decline through inappropriate land use and inadequate buffer zones falls squarely within the scope of deterioration.

2.6 The appellant does not suggest that this is an infrastructure project of national significance or otherwise falls into a category where wholly exceptional reasons apply. Mr Wilkins’ PoE instead seeks to argue that no deterioration will occur, and that the development might even be beneficial. As I set out below, I fundamentally disagree with that assessment.

3.0 Tree Classification: Ancient or Veteran?

T72 ancient vs veteran

3.1 Mr Wilkins contents that oak tree T72 is not yet an ancient tree but only a veteran, In the penultimate paragraph on his page 24 of his PoE (CD 13.11.01) he states:

T72 is in my opinion still in the veteran Phase as it has not started to undergo 'retrenchment' or crown reorganisation by significantly reduce its' overall canopy size.

3.2 However, it is agreed in the SoCG that this distinction is immaterial in policy terms. But, notwithstanding this, it is important to note that ancient trees are, by their nature, rarer than veteran trees. Indeed, the Standing Advice states (in a section headed '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.

3.3 In my PoE (CD14.04 paragraph 6.152) I explain that, as well as having great age and size compared with others of the species, tree T72 exhibits multiple characteristics associated with ancient status: 'dead branches or stems >15cm, diameter, hollowing of the trunk, fruit bodies of fungi known to cause wood, decay. And I also note that 'Rot site and holes and water pockets are not apparent from a ground, inspection'.

3.4 In a text box at the top of page 5 LONSDALE explains how crown retrenchment occurs. It states:

Crown retrenchment is believed to result from a combination of physiological and biomechanical changes associated with growth and aging (Lonsdale, 2004). The biomechanical changes include an increase in leverage as branches lengthen, together with the effects of an increasing incidence of wood decay. Among the physiological changes, the increase in distance between absorptive roots and shoot tips might be especially important. Also, in broadleaved species, the progressive reduction in the length of annual shoot increments in the crown periphery is thought to lead to an increase in hydraulic resistance because of an associated increase in the number of vessel endings per unit length of

branchwood (Rust & Roloff, 2002). A further increase in resistance could occur when sapwood increments become increasingly narrow as a result of being spread around a very large stem girth.

3.5 It is important to note that the crown on the northern side of tree T72 has been reduced to remove risk to adjacent overhead lines. This is in effect artificial crown retrenchment. On the south side a large limb has fallen. This is rather drastic natural crown retrenchment. Had the branches on the north side not been reduced it is likely that more catastrophic failures, like that on the south side, would have occurred. The natural biomechanical changes on the south side resulted in catastrophic branch failure, the anthropogenic biomechanical changes on the north side resulted in anthropogenic crown reduction, but would likely have had more catastrophic reduction had there been no human intervention. Either way the tree has commenced crown reduction.

3.6 The great age, size and the condition of this tree are discussed below and in my PoE, but it is worth noting that, in addition to what the tree survey notes, I have noted an area of basal rot in the east side of this tree. This is further evidence of hollowing which makes this tree even more important, if that is possible, in terms of its 'irreplaceable habitat' value.

3.7 Indeed LONSDALE (CD18.05) notes that ancient trees are particularly important for lichens it states:

5.5.1 Surface habitats on bark and wood When managing trees and their surroundings, the requirements of the many species that use the surfaces of bark and wood, whether living or dead, should be given as much attention as those of the species that develop in decaying wood. The key requirements include the following:

- habitat continuity for lichen communities that are found only on ancient trees (this should be assured by suitable tree management and, if necessary, planting of appropriate species)*
- avoidance of atmospheric pollution, which is harmful to lichens [if this is a regional problem].*

3.8 As set out in my main PoE, tree T72's girth, age characteristics, decay features and position within the general age structure for English oaks (Quercus robur) support its classification as ancient under both the NPPF glossary and Lonsdale's framework.

3.9 Indeed, the appellant's own tree AIA and Tree Condition Survey (included in their original proof CD13.03, November 2025, page 20) gives a summary of the features of the tree. It states:

A Veteran tree growing close to the southern side of the overhead power lines. The larger lateral to the northern side have been reduced to clear the power lines. A number of decay fungi are observed on this tree including Ganoderma and Fistulina. There is a historic large failed branch to the southern side of this tree. We recommend that this tree is subject to a climbing inspection and consideration is given to very lightly reducing the canopy to reduce the stress on the lower unions ...

3.10 As noted above Tree T72 shows evidence of basal hollowing of the trunk of the tree, probably the result of the *Fistulina* (Beefsteak fungus – *Fistulina hepatica*) infestation observed by the appellant’s arborist. *Fistulina hepatica* is, with *Laetiporous sulphureus*, one of the two key species for creating hollowing in *Q.robur* and therefore a keystone species for saproxylic animals and fungi that depend on such rare deadwood habitats.

3.11 On the appellants point about the tree not having yet begun crown retrenchment there are three points to consider in rebuttal 1) a large branch that the appellant notes has fallen on the southern side of the tree is clear evidence of retrenchment albeit of one of the more catastrophic examples of the process; 2) as pointed out in the AIA the *larger lateral[s] to the northern side have been reduced to clear the power lines*, this is another example of crown retrenchment albeit of an anthropogenic kind; 3) the AIA recommends that ‘*consideration is given to very lightly reducing the canopy to reduce the stress on the lower unions*’ which would, again, be another example of crown retrenchment albeit, again, of anthropogenic origin.

3.12 Indeed, on the site visit the appellant’s arborist noted that the effect of the reduction of the canopy to clear the power lines will have not only reduced the canopy on that site but had a rejuvenating effect on the canopy on the northern side of the tree and the health of the tree as a whole. I agreed with him. These works were both pre-empting the natural process of crown retrenchment and rejuvenation and, at the same time, mimicking it. ‘Retrenchment pruning’ is discussed in paragraph 4.4.4.1 and in subsequent tables and diagrams of LONSDALE.

3.13 Further, crown retrenchment is a process, not a binary switch, its onset and expression vary by species, site conditions and can be affected by tree management. Tree T72 has lost a major scaffold limb to the south and had significant management to avoid damage to overhead cables to the north. This work has resulted in a very crude type of retrenchment pruning. The suggestion that tree T72 cannot be ancient until a particular illustrative diagram in LONSDALE (CD18.05) is mirrored precisely in the field is a misreading of that guidance. In addition, my proof of evidence demonstrates that trees of this size fall into the age and size categories appropriate for an ‘ancient’ diagnosis.

3.14 In any event, NPPF 193(c) and the Standing Advice make clear that both ancient and veteran trees are treated as irreplaceable habitat and afforded the same protective test. The attempt to downgrade tree T72 is therefore both factually questionable and immaterial to the core policy position: tree T72 is, at least, a veteran tree of very high significance, and in my opinion an ancient tree. Whether ancient or veteran the treatment in the proposed development, should be the same but with greater weight given to the rarity of the ancient tree

Other veteran trees (T3, T4, T39, T50 T56, T87)

3.15 The appellant now recognises T3 (oak), T4 (oak) T39 (lime), T50 (oak), T56 (oak) as veteran trees, (see paragraphs 1.4 and 1.6 of the Arboriculture Statement of Common Ground Arb SoCG CD05.06).

3.16 It is agreed that oak tree T87 is a mature tree that ‘merits consideration during the design of the layout’ (Arb SoCG paragraph 1.7). The Council considers this tree to be a ‘future veteran’ (cf LONSDALE paragraph 5.5 bullet 3, 7.34 and 7.35).

3.17 In addition it is agreed that oak tree (T21) is a notable tree.)paragraph 1.5 of the ASoCG)

3.18 This agreement regarding the status of these trees aligns with the concerns I set out previously in my PoE that they form part of an assemblage of ancient, veteran and near-veteran trees along the western and south-eastern edges of the site.

3.19 This acknowledgement reinforces – rather than diminishes – my conclusion that the site hosts a cluster of irreplaceable habitat features requiring generous, connected buffer zones and that a precautionary approach to new development is the right one.

3.20 The precautionary approach is confirmed as a general rule in LONSDALE (see paragraphs: 3.2.5.2 ‘fertiliser use’, and text box ‘pesticide use’, 3.3 ‘arable farming, 3.4.1.2 ‘cutting and extraction...’, and bullet eight ‘machinery and skidder routes’, 3.7.1 ‘mulching’ bullet 6, 3.8 ‘protection of trees against fire’, 3.8.1 ‘avoidance of damage from bonfires’, ‘vegetation management in wood pasture’ – sites to be managed ‘with sedentary species in mind’ 5.4.3.1’) as BS 5837 (2012) paragraph 6.11.

3.21 Whilst I acknowledge that the precautionary approach is not specifically targeted at housing development, I consider that if it is required when considering mulching or fertiliser use it should be required when considering potentially far more damaging operations such as housebuilding. Without prejudice, I suggest that the precautionary approach will clearly be required to be integrated into any site management, should the Inspector be minded to allow the appeal.

3.22 Importantly at paragraph 4.5.11 of BS 5837 (20120)(CD18.04) there is a note which states:

Whilst veteran trees typically provide a range of niche habitats, they are especially valuable if ancient, due to their scarcity and high habitat values for associated species of fungi, lichens and saproxylic invertebrates, including some which are rare or endangered and occur only where such trees have been continuously present for centuries

3.23 This site is open countryside. There is no evidence that it has been subject to substantial development. The arboricultural evidence is that there have been ancient and veteran trees in this landscape for centuries.

3.24 In the AIA and Tree Condition Survey under the description of oak tree T72 (section 2.0 CD13.03) Mr Wilkins advises ‘very lightly reducing the canopy to reduce the stress on lower unions’ may be needed after a climbing survey. There are various points where this is discussed in LONSDALE. Discussing the ‘Prevention of serious mechanical failure’ in section 4.2.1, LONSDALE states:

If a properly conducted risk assessment shows a need to protect people or property, and if other measures (e.g. “moving the target”) are not feasible, tree work should be carried out in order to mitigate the risk, even if this is not required for the sake of the tree alone.

3.25 This point is discussed further in the section on Pathways, Public Access and Protection Areas

Oak tree T87

3.26 Appendix B of Mr Wilkins’ PoE states that:

T87 is in my opinion still in the veteran stage of life as it has not started to significantly reduce its’ overall canopy size.

3.27 Whilst it seems this may be a cut and paste error, I still consider this tree to be at least on the verge of being a veteran. Applying the precautionary principle it should be treated as such in any proposals.

3.28 In policy terms, NPPF paragraph 193(c) and the Standing Advice treat ancient and veteran trees together as irreplaceable habitats subject to the same protection. Even if tree T72 were “only” veteran, the relevant policy protection would remain the same. The attempt to downgrade the tree does not change the applicable policy test.

3.29 The appellant also acknowledges that lime T39 and oak T56 are veteran trees and that T87 displays veteranising characteristics. That supports my earlier evidence that we are dealing with a grouped assemblage of ancient, veteran and near-veteran trees along the western and southern boundaries, not isolated individual specimens.

4. Root Protection Areas and Buffer Zones

Appellant's New RPA/Buffer Methodology

4.1 Mr Wilkins argues in paragraphs 3.1 to 3.5 of his PoE (CD 13.11.01) that:

- BS5837's 15m cap on RPA radius is sufficient for all trees, including veterans;
- Natural England's recommended 15x diameter uncapped RPA ("NE RPA") is 'not based on science' and should be regarded as an optional 'extra buffer'; and
- WBC is 'mis-using' Standing Advice by seeking additional space beyond the NE RPA for tree T72.

4.2 This is not an accurate portrayal of the policy or the guidance.

British Standard 5837 (2012) and RPAs

4.3 BS 5837 (2012) establishes a minimum starting point for RPAs across all development sites and all tree categories. It is explicit that RPAs 'may be modified' in the light of site-specific factors, including, at paragraph 4.6.3: (a) the morphology and disposition of the roots, when influenced by past or existing site conditions (e.g. the presence of roads, structures and underground apparatus); (b) topography and drainage; c) the soil type and structure; d) the likely tolerance of the tree to root disturbance or damage, based on factors such as species, age, condition and past management.

4.4 BS 5837 does not purport to be a complete guide to the protection of ancient or veteran trees. Indeed, it only references the term ancient or veteran trees six times. These are in relation to: giving a definition of 'veteran' (paragraph 3.12) that is notably different from that in the NPPF; that 'the tree survey might identify the presence of veteran trees; (paragraph 4.5.11); on the cascade chart for tree quality assessment on page 9, showing an A3 categorisation for veteran trees; in a Note under paragraph 4.5.11 previously discussed in this rebuttal which points to the enhanced value for ancient trees over veterans; on the particular care needed regarding the retention of veteran trees within new development, with emphasis on adequate space for retention and maintenance in the long term (at paragraph 5.2.4); at the top of a section on 'permanent hard surfacing' which notes that 'This subclause does not apply to veteran trees, where it is recommended that no construction, including the installation of new hard surfacing, occurs within the RPA (paragraph 7.4).

4.5 Recognising that BS5837 does not, by itself, adequately protect ancient/veteran trees, Natural England and the Forestry Commission have issued Standing Advice which specifically amends and strengthens the approach for these irreplaceable habitats.

The Standing Advice on Buffer Zones RPAs

4.6 The Standing Advice (CD18.06) conflates RPAs and Buffer Zones when, concluding the paragraph on the dimensions for Buffer Zones clearly states at the bottom of page 8:

For ancient or veteran trees (including those on the woodland boundary), the buffer zone should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5 metres from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter. This will create a minimum root protection area.

4.7 The Standing Advice on Buffer Zones and RPAs (it is clear from the above that the Standing Advice conflates the two) states that they should be areas of semi-natural habitat and not private gardens or built form (page 9)

4.8 The Standing Advice first mentions buffer zones as a mitigation measure. Mitigation being mentioned first on page 7 where it states:

If you decide to grant planning permission that results in unavoidable loss or deterioration where wholly exceptional reasons are demonstrated, you should use planning conditions or obligations to make sure the developer:

- *avoids damage*
- *mitigates against damage*
- *compensates for loss or damage (use as a last resort)*

This is known as the mitigation hierarchy. You should apply the mitigation hierarchy in line with NPPF paragraph 180a to avoid significant harm to biodiversity.

4.9 Second in the mitigation hierarchy after the avoidance of harm to ancient or veteran trees is mitigation itself. Buffer Zones / extended RPAs are part of that mitigation, and the Standing Advice tells us, on page 9, that they should be of 'woodland' or 'a mix of scrub, grassland, heathland and wetland' and 'where possible; they should 'contribute to wider ecological networks' and 'be part of the green infrastructure of the area'.

4.10 On page 8, the Standing Advice also states that the size and type of the Buffer Zone / RPA should vary depending on the 'scale and type of development' and the 'character of the surrounding area'. In addition, larger Buffer Zones / RPAs 'are more likely to be needed if the surrounding area is: less densely wooded; close to residential areas; or steeply sloped.

4.11 The Standing Advice recommendations are the appropriate standard to apply at planning stage for ancient and veteran trees. They are not optional; they supplement

BS5837 because veteran trees require more conservative assumptions and actions to protect these highly important and sensitive trees and their Buffer Zones / RPAs.

4.12 The approach in the Standing Advice is supported with detailed guidance in LONSDALE, particularly section 3.1 (where RPAs are mentioned in the second, third and eighth bullet points and in a text box dedicated to the subject following that section. The text box concludes that:

‘A radius of 15 times the stem diameter at breast height, or five metres beyond the edge of the tree’s canopy, whichever is the greater, is recommended in the present book (in relation to ploughing and grazing). on the other hand, it can sometimes be sufficient for the RPA to be a zone of very low-intensity use, rather than one of total exclusion of farming or other activities.’

4.13 It is clear that ‘very low-intensity’ agricultural use may be suitable for the extended RPAs of ancient or veteran trees, according to LONSDALE.

Compensatory off-setting and Buffer Zones / RPAs that are hostile or not under the appellant’s control

4.14 The appellant claims that adjusting RPAs to reflect proximity to roads or other trees is unnecessary and unsupported by any guidance.

4.15 Discussing the ancient or veteran tree buffer zone which ‘should be at least 15 times larger than the diameter (diameter at breast height or ‘dbh’) of the tree the Standing Advice states that:

Where assessment shows other impacts are likely to extend beyond this distance, the proposal is likely to need a larger buffer zone.

4.16 The words ‘at least’ are important here, the 15 x dbh Buffer Zone / RPA is to be ‘at least’ that size unless ‘other impacts are likely to extend beyond this distance’ where ‘the proposal is likely to need a larger buffer.

4.17 The default position in British Standard 5837 (2012) and paragraph 5.3.1 – that no structures should be built in the Root Protection Area (RPA) of trees to be retained. Paragraph 5.3.1 states:

5.3 Proximity of structures to trees

5.3.1 The default position should be that structures (see 3.10) are located outside the RPAs of trees to be retained. However, where there is an overriding justification for construction within the RPA, technical solutions might be available that prevent damage to the tree(s) (see Clause 7). If operations within the RPA are proposed, the project arboriculturist should:

a) demonstrate that the tree(s) can remain viable and that the area lost to encroachment can be compensated for elsewhere, contiguous with its RPA;

b) propose a series of mitigation measures to improve the soil environment that is used by the tree for growth.

4.18 The British Standard defines ‘structures’ at paragraph 3.10 which states:

3.10 structure: manufactured object, such as a building, carriageway, path, wall, service run, and built or excavated earthwork

4.19 In the current proposals there are numerous ‘structures’ that appear to be located within the root protection area of the ancient and veteran trees both existing and proposed.

4.20 Understanding the default position, is key for the protection of the minimum area of land required for the sustainable retention of trees. But in any case, paragraph 5.3.1 is very clear about what the project arboriculturist should do. They should ‘demonstrate that the tree(s) can remain viable and that the area lost to encroachment can be compensated for elsewhere, contiguous with its RPA’. The appellants have not done this.

4.21 It would be unreasonable for the BS 5837 to hold that ‘structures’ (including ‘carriageways’) should not be allowed within the RPA of trees under the default position in paragraph 5.3.1, and that the project arboriculturist should ‘demonstrate that the area lost to encroachment can be compensated for elsewhere, contiguous with the RPA’ and yet to continue to argue that structures such as ‘carriageways’ would have no impact on the development of the root systems of trees.

4.22 Unless there is evidence of radial cracking caused by roots under pavements, carriageways, etc – and in this case there is not - it is reasonable to assume, that there are limited roots under roads and pavements and that compensatory off-setting of the Buffer Zone / RPA of ancient or veteran trees is necessary.

4.23 In addition, it is essential, to ensure the long-term sustainable retention of ancient or veteran trees, that proposals address the need to ensure that the Buffer Zones / RPAs fall within land over which the developer can exercise appropriate control. Therefore, Buffer Zones / RPAs that the developer relies on for the mitigation of effects on ancient or veteran trees cannot fall within adjacent land or within the gardens of proposed or existing housing where it would be unreasonable and impractical to limit the PD rights of landowners or their right to enjoy their land.

4.24 In such circumstances, it is necessary to extend the RPA / buffer further into available, controllable open ground to secure the functional rooting volume and habitat protection. My main PoE (CD14.04) explains how this applies to:

- T3, T4 and T50 along Reading Road;
- T56 on the northern boundary (where parts of the buffer lie in private gardens and off-site land); and

- T87, where half of the current root system lies beneath an adjacent landowners land and the other half lies beneath an existing hardstanding.

4.25 Mr Wilkins does not engage with this principle; he simply re-asserts the BS5837 base calculation and labels any deviation as “mis-use”. I disagree. The approach advocated in my evidence is consistent with both Standing Advice and BS5837’s flexibility to adapt RPAs based on actual rooting conditions.

4.26 In this case, trees T3, T4, T50 (adjacent to Reading Road and competing with each other for root space, minerals, nutrients and water), T56 (straddling the boundary with properties to the north) and T87 (partly under hardstanding) are all subject to specific constraints that indicate that compensatory offsetting of Buffer Zones / RPAs are needed if damage to ancient or veteran trees (or trees that should be treated as such) is to be mitigated. Simply plotting a circular RPA, without regard to these realities, does not reflect how their root systems have developed nor how the irreplaceable habitat functions.

Construction Working Zones (CWZ)

4.27 The Council’s concerns also include the space needed for Construction Working Zones around RPAs/buffer zones. As the email from Ms Carter (16 January 2026) records, the appellant’s original layout did not provide realistic CWZs without encroachment.

4.28 Mr Wilkins places heavy reliance on Tree Protection Fencing and, at paragraph 3.18, asserts that CEZs can be adjusted to protect areas larger than the buffer zones. However, no firm, scaled CWZ plan has been provided alongside the new masterplan. My view remains that, given the quantum and disposition of dwellings and infrastructure, there is insufficient space to:

- provide full NE buffer zones (including compensatory offset),
- accommodate CWZs during construction, and
- avoid long-term operational pressures from public open space, structures, SuDS and footpaths within Buffer Zones / RPAs.

4.29 The proposals therefore fail to demonstrate that no damage or deterioration will occur to ancient or veteran trees.

5.0 Pathways, Public Access, and Protection Areas

5.1 A further point made by Mr Wilkins in his February PoE is that footpaths and public access within the RPAs/buffer zones of veteran trees are acceptable, and may in fact be beneficial, with examples cited from Richmond Park, Windsor Great Park and Epping Forest.

5.2 Those sites are large, historic landscapes with expert tree management teams on hand, extensive management regimes and significantly greater space per tree than is available here. Many such trees are fenced, or footfall is deliberately directed away or managed seasonally to reduce pressure on ancient or veteran trees. At other sites, for example the intensively visited Royal Horticultural Society Wisley and Royal Botanic Gardens Kew, highly expert tree management teams, (backed by the very best and most specific scientific knowledge) administer highly technical solutions to reduce pressure from high visitor numbers.

5.3 It is not appropriate, nor practicable to assume that the conditions that can be tolerated in such sites can simply be transposed to a relatively small, tightly planned residential scheme where the management is unlikely ever to be nearly as focussed or informed sites where the main focus is trees and landscape not housing.

5.4 Lonsdale (3.5.3.1) specifically identifies that, in recreational areas, the RPA of a veteran tree should be delineated and that intense use may require load-spreading surfaces, re-routing or raised walkways. Natural England's Standing Advice (under sections on direct and indirect effects of development on pages 5 and 6) warns that increased trampling, compaction and disturbance within buffer zones can lead to deterioration of ancient/veteran trees and their associated ground flora.

5.5 The updated illustrative masterplan still shows footpaths and areas of public access within the vicinity of the buffer zones around trees T72, T39 and other veterans. Even with localised amendments (e.g. rerouting a path to the south of T39), the overall quantum and disposition of development means that recreational pressures will increase materially in precisely those areas where Standing Advice urges caution.

5.6 In the section above on 'Tree Classification, Ancient or Veteran', I noted that in the section on the approach to works required to prevent serious mechanical failure LONSDALE recommended 'moving the target' ie rather than carrying out preventative maintenance on the tree whatever it might hit should be moved away or designed out of any proposals.

5.7 LONSDALE addresses this further at paragraph 3.5.2.1 under the heading of 'avoidance of new, unnecessary risks', It states:

When managing sites for whatever reason, avoid creating new or increased targets; as happens for example following the construction of facilities (e.g. car

parks or buildings) which will bring people or property into a high-risk zone. Not only does this create targets, it also harms trees and therefore makes them more hazardous. Specific guidelines include the following.

- Public facilities should, if possible, be located to avoid concentrating people or high value property where they could be harmed in the event of the failure of trees (veteran or otherwise). This option of “moving the target” should be preferred to tree work that might otherwise be required to mitigate the risk but would harm the trees. In particular:*

- long-term facilities such as play areas, permanent car parks, seats and paths that already exist near veteran trees should preferably be re-located*

- short-term facilities (e.g. temporary car parks, marquees for outdoor concerts, or courses for occasional equestrian events) should be located according to the same principle....*

5.8 In paragraph 3.5 and under the heading ‘Recreational Sites and Other Areas of High Public Use’ LONSDALE states:

Of the many kinds of site where trees and people are often in close juxtaposition, the main categories are recreational areas and public highways...

5.9 It is, therefore, impossible to reconcile the fact that the arrangement for public space in the proposals relies on placing public open space within the Buffer Zone / RPA of ancient/veteran oak tree T72. The Standing Advice provides a clear list of direct and indirect effects (on pages 5 and 6 of CD18.06), and yet the very Buffer Zone / RPA now designed to protect T72 has been targeted in both of the illustrative masterplans to be public open space – deliberately introducing a number of damaging effects into it.

5.10 Except where such conditions are pre-existing, and therefore cannot simply be avoided, the insertion of public open space into the Buffer Zone / RPA of ancient/veteran trees introduces ‘targets’ and activities and uses that compromise and thereby harm the trees, however that harm may then be mitigated.

5.11 I do not accept that this can be fully mitigated by future management plans alone. The starting point in policy terms is avoidance of deterioration to irreplaceable habitats, not accommodation of new pressures and reliance on long-term behavioural controls.

6.0 Drainage, hydrology and SuDS

6.1 Mr Wilkins suggests, in his PoE at paragraphs 4.12 and 5.1 to 5.5 (CD13.11.01), that the site suffers from waterlogging and that the proposed drainage strategy could improve conditions for veteran trees, including tree T72, by alleviating compaction and poor aeration.

6.2 While appropriate soil amelioration can be beneficial, it must, logically, be based on highly technical study and the resulting evidence and analysis. This is entirely lacking in this case.

6.3 Standing Advice (pages 6 and 9) and LONSDALE (paragraphs 3.7, 3.7.2, 6.22) both identify changes to hydrology as a potential source of harm to ancient and veteran trees. Excavation for ditches, attenuation basins, bunds and other SuDS features can:

- disturb roots, soil structure and crucial mycorrhizal associations;
- raise or lower the local water table; and
- alter moisture regimes on which the tree and its associated biota have adapted over many decades.

All of these are potentially harmful to ancient or veteran trees.

6.4 In CD14.04 I explain that the indicative drainage strategy places significant engineered features close to T50 and in parts of the site where high groundwater levels are recorded. There is no detailed evidence at this stage that these works can be designed and implemented wholly outside Buffer Zones / RPAs of ancient or veteran tree, nor that they can avoid altering the hydrological regime within the RPAs of the veteran trees.

6.5 These matters cannot, in my view, simply be deferred to a later Arboricultural Method Statement. The outline scheme must demonstrate, now, that a layout of the scale proposed can be achieved without causing deterioration to irreplaceable habitats. As presently illustrated, even in the amended illustrative masterplan, I remain unconvinced that this is the case.

7.0 Highway Works and Off Site Trees

7.1 Mr Wilkins provides more explanation of how the s278 footway widening on Reading Road could, in principle, be designed to avoid excavation in the near-surface root zone by building out into the carriageway.

7.2 However, my concerns for ancient and veteran trees, extend beyond the geometry of the widened footway. They relate to the combined effect of:

- the primary impacts of the installation of new lighting columns and the effects on root systems and aerial parts of trees.
- the secondary impacts of light pollution and ancient or veteran tree management required.
- service trenching for lighting (and for non-veteran trees for bus stop infrastructure).
- Increased pedestrian and vehicular disturbance close to the veteran tree trunks and bank.

7.3 Standing Advice, on Buffer Zones / RPAs states that ‘You should not approve development proposals, ..., within a buffer zone (page 9). BS 5837 (paragraph 5.3.1) explains the ‘default position’ that requires that new structures should not be placed within RPAs.

7.4 The appellants have not yet provided a worked-through, scaled tree constraints overlay for these off-site works; it instead relies on general assurances that “good practice” will be followed.

7.5 In my opinion, there remains a real risk that the s278 works, as part of the wider package of highway changes, will incrementally erode the root systems, the aerial parts and the quality of the irreplaceable habitat of veteran and other trees (the veteran trees of the future) along the Reading Road.

8.0 Young Trees and Succession

8.1 Mr Wilkins now confirms in his PoE (paragraph 7.6) that group G73 would be retained in the amended illustrative masterplan but tree T74, also located within the RPA of tree T72, would be removed. but notes that spontaneous regeneration may occur elsewhere in the open space and that some younger trees could be retained (7.7 and 7.8).

8.2 As I explain in my PoE (CD14.04), these younger trees are likely to be progeny of tree T72 and form part of the successional cohort needed to maintain the veteran tree habitat over time. Lonsdale emphasises that management of ancient/veteran tree habitat should consider not just the present generation but also future veterans.

8.3 Removing a known cohort within the RPA and relying instead on unquantified future regeneration does not represent good practice in terms of maintaining the long-term continuity of this irreplaceable habitat. Indeed, although LONSDALE does not specifically address the issue of natural regeneration of the local population of ancient or veteran trees it does state (at paragraph 5.4.3.1):

Trees, as well as scrub, should be planted if they fail to regenerate naturally, preferably using seedlings or cuttings raised from the existing population of ancient trees.

8.4 But, better than planting new trees is the retention of existing ones. It is good that, during the course of preparation for the appeal G7 is now scheduled for retention. T74 could be retained with a small change to the amended illustrative layout. But sadly this well-established young tree, 'raised from the existing population of ancient trees' on site is still scheduled for removal.

8.5 It should be noted that some these successional cohort oaks are now protected by two new TPOs (CD18.17 and CD18.18). This adds to the tree protection on the site already afforded by TPO 0272/1984 (CD18.19).

9.0 ‘Positive Effects’ and Management

9.1 Mr Wilkins lists a series of potential “benefits” arising from the development (paragraphs 8.1 and 8.2), including: ‘removal of compaction and waterlogging, and ‘cessation of deleterious effects of grazing, livestock, agriculture and other activities’ (paragraph 8.1 sub-paragraph b). cessation of deleterious effects of grazing’, management of open spaces and trees (8.1 sub-paragraphs f, and h)

9.2 But there is no detailed reconciliation of these proposed benefits vs the harm to the ancient and veteran trees and their habitats. Indeed, some of the benefits are questionable at best – for example ‘Establishment of self-set and planted trees’. Street trees shown close to dwellings in the amended illustrative layout are unlikely to be oaks because of the high water demand (and high frequency of this species in subsidence cases) and large size of this species and so the veteran oak habitat is unlikely to be enhanced or even retained by such ‘benefits’. Self-set trees will, of course, have far fewer opportunities on a sub-urban development than in open countryside, especially a low-input, low maintenance agricultural setting such as the one that currently applies.

9.3 I agree that some of these activities, taken individually, can be beneficial in some contexts (notably 8.1c ‘removal of block built barn and slab’). However, NPPF 193(c) is concerned with whether the proposal, as-a-whole, results in the loss or deterioration of irreplaceable habitats. It is not a balancing exercise where new pressures and deterioration might be traded off against improvements and new management measures. Where there is harm then proposals should be refused unless ‘wholly exceptional reasons’ and a ‘suitable mitigation strategy’ exist, which is plainly not the case here.

9.4 Having regard to:

- the constrained nature of the layout;
- the proximity of development, public open space, footpaths and SuDS to veteran trees and their RPAs/buffer zones;
- the intensification of public use; and
- the removal of younger trees within veteran RPAs
- The lack of detail in the proposed protection of ancient or veteran trees and in the proposed benefits of the scheme

9.5 I remain of the opinion that the proposals would lead to deterioration of irreplaceable habitats, and that the suggested management “benefits” do not avoid or even adequately mitigate that harm.

10 New TPOs

10.1 Two new TPOs have been made to protect ancient or veteran trees, successional cohort oaks and trees adjacent to the proposed s.278 Highways works. These TPOs (2009/2026 and 2010/2026) are available at CD18.???

11. Conclusion

11.1 Having reviewed Mr Wilkins PoE, I remain firmly of the view that the appeal scheme:

- Fails to provide adequate RPAs and buffer zones for ancient and veteran trees, including trees T3, T4, T39, T50, T56, T72 and T87, when compensatory offset Buffer Zones / RPAs and undefined Construction Working Zones are taken into account;
- Introduces new and intensified pressures through drainage works, SuDS, public access, habitations, the hubbub of daily use (focussed particularly on tree T72), and highways infrastructure within or adjacent to these buffer zones; and
- Will, on the balance of probability, result in deterioration of irreplaceable habitat in the form of ancient or veteran trees.

11.2 I consider that the appeal proposals remain in conflict with:

- NPPF paragraph 193(c);
- BS 5837 (2012)
- Natural England Standing Advice on ancient woodland, ancient trees and veteran trees and development
- LONSDALE, which represents the best and most up-to-date guidance on ancient or veteran trees, and;
- Core Strategy policy CP3(c), and Local plan policies CC03(d) and TB21, in relation to ancient or veteran trees.

11.3 No wholly exceptional reasons have been advanced that could justify such deterioration, and no suitable compensation strategy has been put forward for the deterioration of the ancient or veteran tree irreplaceable habitat. Indeed, much of the appellant's effort to date has been in relatively small changes to mitigation measures rather than in compensation (the third plank in the mitigation hierarchy described in the Standing Advice).

11.4 Consequently, the additional material in Mr Wilkins' PoE does not alter my original conclusions. The arboricultural objections set out in CD14.04 remain fully justified and support the Council's position that appeal should be dismissed.