

DfT Reference: TAA/24/APP/03

Document Reference: CD26-01-APP-W4-1

The Cambourne to Cambridge Order

Transport and Works Act 1992

Transport and Works (Inquiries Procedure) Rules 2004

Inquiry into:

THE CAMBOURNE TO CAMBRIDGE ORDER

PROOF OF EVIDENCE

of

Chris Alder MSc HNDArb FArborA MICFor RCarborA

Barrell Tree Consultancy

On behalf of Cambridgeshire County Council

8th August 2025

Planning Inspectorate reference: DPI/E0535/25/1

Barrell reference: 25024-Alder-Proof-Arboriculture

Contents

Sections	page no.
1. Qualifications and experience	3
2. Introduction	5
3. Policy Background	8
4. The Proposals	10
5. Mitigation and Tree Protection	13
6. Translocation Methodology	16
7. Translocation Case Study	17
8. Representations	18
9. Compensation Strategy and Orchard Restoration	20
10. Conclusions	21

Appendices – CD26-01-APP-W4-2

	Page no.
1. Tree survey plan	4
2. Tree survey schedule	6
3. Ruskins Outline Translocation Methodology	8
4. Email from Genome Campus	12
5. Moving a 100 year old Black Mulberry Tree	15
6. Draft Arboricultural Method Statement and Tree Protection Plan	17

1. QUALIFICATIONS AND EXPERIENCE

1.1 My name is Chris Alder, I am an Associate Director and Consultant with Barrell Tree Consultancy, an arboricultural consultancy practice based at Field House, Fordingbridge Business Park, Ashford Road, Fordingbridge, Hampshire. In my role I deal with all aspects of urban tree management and have experience in dealing with trees and woodlands in the planning system. I hold the following qualifications:

- BTEC Higher National Diploma in Arboriculture from Durham College of Agriculture and Horticulture (1994)
- Master of Science Degree in Resource Management (Arboriculture) from Middlesex University (2003)
- Chartered Forester (2009)
- Fellow (2001) and Registered Consultant (2017) of the Arboricultural Association
- LANTRA Professional Tree Inspection (2007) and refreshers (2016 and 2025)

1.2 I have been working with trees since 1989, starting out on a large estate gaining valuable practical experience of estate forestry, woodland and vegetation management. On graduating in 1994, I took up the post of Assistant Tree Officer at East Dorset District Council, primarily employed to review tree preservation orders. In 1997 I moved to North Dorset District Council as the Trees and Landscape Officer dealing with protected trees, planning related issues and council-owned trees. In 2001 I moved to ADAS to take up the role of Lead Arboricultural Consultant within a multi-disciplinary team of ecologists, surveyors, soil and water engineers, and wildlife consultants providing solutions to a wide range of landowners in relation to infrastructure and development planning. Although focusing mainly on tree risk related issues, I also had experience of managing large scale tree surveys and resolving conflicts between utility (EDF), transport (Network Rail) providers and tree owners. Whilst at ADAS I was a main author of the DCLG research publication Trees in Towns II. I joined Barrell Tree Consultancy in February 2008, bringing my varied experience to this specialist practice, and was appointed Associate Director in December 2020.

1.3 I ensure that I keep professionally current through attendance at courses, seminars and conferences. In the last 12 months I have attended the following courses/events:

- Arboricultural Association/LANTRA - Professional Tree Inspection refresher
- Ancient Tree Forum/Arboricultural Association - VETcert course
- Arboricultural Association – National Arboriculture Conference
- Institute of Chartered Foresters – Biodiversity Net Gain
- Arboricultural Association - Registered Consultants Standards Day
- Barcham Tree Nurseries - Tree selection and planting masterclass
- Institute of Chartered Foresters - National Conference, Trees and Planning in the Built Environment
- Ancient Tree Forum - International Conference, The Biodiversity of Pollarded Trees

I regularly present continuing professional development to clients, architectural practitioners, urban designers, landscape architects, engineers and other arboricultural professionals.

1.4 I have given evidence at a number of Public Inquiries over recent years, including:

- In 2016 I acted for Cooper Estates Strategic Land Limited in their appeal against Wokingham Borough Council (PINS ref: APP/X0360/W/15/3097721) for failing to give notice within the prescribed period of a decision on an outline application for up to 57 new dwellings and access arrangements. I successfully demonstrated that the proposed development would not have a harmful effect to existing trees, including several veteran trees, and nor would the trees be likely to present a significant threat to occupants of the development and their property.
- In 2021 I acted for Bloor Homes and Sandleford Park Partnership in their appeal against the decision by West Berkshire Council (PINS ref: APP/W0340/W/3265460) to refuse consent for an outline application for up to 1000 dwellings, extra care housing, primary school and associated local centre and infrastructure. I successfully demonstrated that through proper protection and management, including the use of no-dig surfacing within designated ancient woodland, the development would not have a detrimental impact on retained veteran trees and ancient semi-natural woodland. The Secretary of State concluded: *'Overall he agrees that subject to the provision of appropriate buffers and a management plan, there would be no harm to the ancient woodland or veteran trees on the site'*.
- In 2023 I acted for PJ Livesey Holdings in their appeal against the failure to make a decision by Portsmouth City Council (PINS ref: APP/Z1775/W/22/3302931) for an outline application (tandem Listed Building Consent application) for redevelopment of St James Hospital to provide 146 dwellings and associated works to provide extensions, ancillary buildings, erection of 84 new dwellings, retention of cricket pitch and listed chapel, parking and associated landscaping. I successfully demonstrated that new planting would be expected to provide long term benefit as mitigation for removed trees, and that there would be no harm arising from the proposed works to retained protected trees.
- In 2025 I acted for Churchill Retirement Living Ltd in their appeal against Bournemouth, Christchurch and Poole Council (PINS ref: APP/V1260/W/24/3351431) for non-determination for a full application for multigenerational community comprising of 177 open market affordable and retirement living apartments, Class E commercial space, communal facilities and associated works. I successfully argued that the loss of protected trees would not be harmful to the setting of the adjacent conservation area, and that new planting would be beneficial. The Inspector concluded: *'The removal of a number of protected trees is acceptable because it would enable better use to be made of the site. The scheme would replace the trees with a more appropriate species for their urban location.'*
- In 2025 I acted for Croydon and District Education Trust in their appeal against the refusal by Tandridge District Council (PINS Ref: APP/M3645/W/24/3354498) for an outline application for 80 new residential dwellings, including 40% affordable housing, landscaping, amenity space and parking. I successfully negotiated with the LPA Tree Officer that the lost trees could be mitigated by new planting, and that the retained trees, including veteran trees, could be successfully protected during construction. Arboricultural matters were agreed prior to Inquiry hearing, and the reason for refusal relating to trees fell away.

2. INTRODUCTION

- 2.1 This proof of evidence refers to arboricultural matters concerning the Transport and Works Act Order application made by the Greater Cambridge Partnership for a public transport route linking Cambourne to Cambridge. The proposed works include a dedicated busway serving communities in Cambourne and the proposed Bourn Airfield development, as well as in Hardwick, Coton and the West Cambridge campus. An emergency and maintenance access track (service track) will run alongside the busway, also providing a path for pedestrians and cyclists and, for the majority of the route, horse riders.
- 2.2 I am instructed to prepare a Proof of Evidence relating to the assessment and management of the potential impact of the busway route on several Bramley apple trees located at Coton Orchard.
- 2.3 I have been granted access to the application documents and have reviewed those of relevance to this proof.
- 2.4 With regard to the Statement of Matters **(CD25-01)** the following matters are related to my Proof of Evidence.

Statement of Matters Reference	Statement of Matters text	Coverage through my Proof of Evidence	Coverage through Proofs of Evidence of Others
4c	The effect of the scheme on the environment, including biodiversity, habitats, and wildlife, with particular reference to the Coton Orchard and Coton Orchard County Wildlife Site.	I will describe the effects of the scheme on the veteran Bramley apple trees at Coton Orchard	Specific details in relation to biodiversity, habitats and wildlife are covered in the Proof of Evidence of Ian Ellis (CD26-01-APP-W13-1) in relation to ecology and bats, specifically Barbastelle, which are covered in the Proof of Evidence of Paola Reason (CD26-01-APP-W12-1) .

- 2.5 Following instructions initiated in February 2025, a site visit was arranged with the owners of Coton Orchard. I visited the site on 18th March 2025, accompanied by Nick Geisler (WSP), Stuart Banks (National Trust), David Franklin (Urban Forestry), and Bridget Sutton (representing Anna Gazeley, Coton Orchard). The weather at the time of inspection was clear, still and sunny with good visibility, and I was able to view each of the 14 Bramley apple trees in their entirety. I inspected each tree and collected data using an iPad with QGIS software, following the guidance set out in section 4.4 of BS5837:2012 **(CD21-01)**. All my observations were of a preliminary nature and did not involve any climbing or detailed investigations beyond what was visible from accessible points at ground level. Each arboricultural feature was inspected, and the numbering scheme is shown on the tree survey plan, appended to this proof and extracted below in Image 1, and recorded in the accompanying tree schedule extracted in Image 2. Root protection areas (RPAs) were calculated as recommended in BS5837:2012, and the nominal RPA radius and veteran tree buffer calculated in accordance with the standing advice for each tree is listed in the tree schedule.



Image 1: Tree survey plan (see full size plan in appendix 1, page 4)

Tree no	Species	Height (m)	Diameter (cm) @ 1.5 m	Maturity	Category	Notes	BS5837 RPA radius (m) 12x diameter	Veteran Tree Buffer radius (m) 15x diameter	Veteran Tree Buffer radius 5 m beyond crown
T1	Bramley apple	2	60*	Dead	U	Stump, elder growing within	n/a	n/a	n/a
T2	Bramley apple	5	65*	Veteran	A	Hollow stem, Innonotus hispidus present, branch hollowing, deadwood and decay from pruning wounds	7.8	9.8	11.2
T3	Bramley apple	5	65*	Veteran	A	Hollow stem and main branches, old Innonotus bracket present	7.8	9.8	10.5
T4	Bramley apple	5	62.5*	Veteran	A	Stem hollowing, main branches decayed wounds and hollowing, old Innonotus bracket present	7.5	9.4	11.2
T5	Bramley apple	5	70*	Veteran	A	Decay present, old Innonotus bracket on branches, stem intact, branch hollowing to nw and se	8.4	10.5	10.7
T6	Bramley apple	4	55*	Veteran	A	Hollow stem, longitudinal crack down stem, branch decay and hollowing	6.6	8.25	9.3
T7	Bramley apple	5	52.5*	Veteran	A	Suppressed by hedge to west, hollow stem and main branches	6.3	7.9	10.8
T8	Bramley apple	5	57.5*	Veteran	A	Old Innonotus bracket on branches, branch hollowing from old wounds, hollowing stem, swelling at stem base	6.9	8.6	11.3
T9	Bramley apple	5	72.5*	Veteran	A	Old Ganoderma sp bracket on stem, hollowing stem and main branches, decay at branch ends, suppressed by hedge and shrubs to west	8.7	10.9	11
T10	Bramley apple	5	65*	Veteran	A	Branch hollowing, decay at pruned ends, woodpecker holes	7.8	9.8	11.1
T11	Bramley apple	5	60*	Veteran	A	Southern branch dead and failed, hollow stem, decay at pruning wounds, hollowing branches	7.2	9	10.1
T12	Bramley apple	4	80*	Veteran	A	Hollow stem and main limbs, pruning wounds decaying, holes and deadwood	9.6	12	11.2
T13	Bramley apple	4	65*	Veteran	A	Hollow stem and branches, failed lateral branches, extensive decay and deadwood	7.8	9.8	11
T14	Bramley apple	4	42.5*	Mature	C	Significant dead branches due to suppression by adjacent by hedge, probable replacement tree, it is much smaller than others	5.1	n/a	n/a

Image 2: Tree survey schedule (see full size schedule in appendix 2, page 6)

- 2.6 I concluded that trees numbered T2 to T13 are, by virtue of their age, size and associated features of veteran status, but that tree T1 is a dead stump, and T14 does not appear old enough nor does it have sufficient associated features to be a veteran.
- 2.7 In summary my evidence will support the retention of the three Bramley apple trees T6, T7 and T8 by the use of specialist translocation for those three trees that are located within the order limits, and by careful protection of the remaining trees it will be possible to avoid significant detrimental impact. My evidence will consider the following elements:
- a. Policy and guidance relating to veteran trees in a development context
 - b. Tree protection, translocation and mitigation proposals
 - c. Conclusions
- 2.8 I can confirm that the evidence which I have prepared and provide for this Inquiry is true, and I confirm that the opinions expressed are my true and professional opinions.

3. POLICY BACKGROUND

3.1 National Policy

The National Planning Policy Framework which was updated in December 2024 (amended 7th February 2025) (**CD8-01**) at paragraph 193 on page 56 says:

When determining planning applications, local planning authorities should apply the following principles:

- a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
- b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*
- c) *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 reasons⁷⁰ and a suitable compensation strategy exists; and*
- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

⁷⁰*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.*

3.2 The NPPF defines a veteran tree in Annex 2: Glossary on page 70 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.’

3.3 Development Plan Policy

South Cambridgeshire Local Plan (September 2018) Policy NH/7 Ancient Woodlands and Veteran Trees (**CD6-02, page 121**) states:

- 1. *Planning permission will be refused for development resulting in the loss or deterioration of ancient woodland (as shown on the Policies Map) or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.*

2. *Development proposals affecting ancient woodland or veteran trees will be expected to mitigate any adverse impacts, and to contribute to the woodland's or veteran tree's management and further enhancement via planning conditions or planning obligations.*

3.4 Cambridge Local Plan (October 2018) Policy 71 Trees **(CD6-01, page 205)** states:

Development will not be permitted which involves felling, significant surgery (either now or in the foreseeable future) and potential root damage to trees of amenity or other value, unless there are demonstrable public benefits accruing from the proposal which clearly outweigh the current and future amenity value of the trees. Development proposals should:

- a. *preserve, protect and enhance existing trees and hedges that have amenity value as perceived from the public realm*
- b. *provide appropriate replacement planting, where felling is proved necessary; and*
- c. *provide sufficient space for trees and other vegetation to mature. Particular consideration should be given to veteran or ancient trees, as defined by Natural England, in order to preserve their historic, ecological and amenity value*

- 3.5 Under Section 198 of the Town and Country Planning Act 1990 **(CD5-08, page 347)**, local planning authorities may make provision for the preservation of trees if it is deemed to be in the interests of amenity. South Cambridgeshire District Council (SCDC) considered the making of a Tree Preservation Order (TPO) in Planning Committee on 15th January 2025. Committee members were made aware that consent for a public transport infrastructure project would override a TPO, but voted 7 to 1 (against the officer's recommendations) to make the provisional TPO on twelve of the trees. The TPO was subsequently confirmed at Planning Committee on 9th April 2025 (plan extracted below in image 3.).

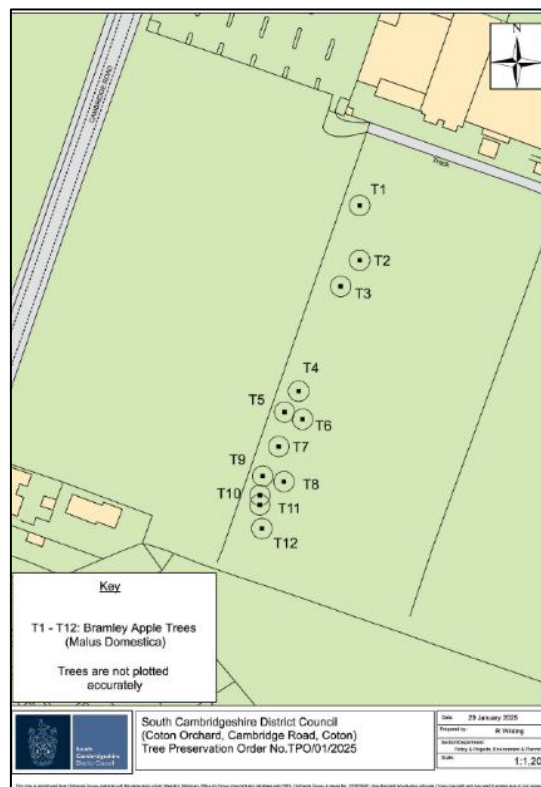


Image 3: Extract of TPO plan.

4 THE PROPOSALS

- 4.1 The CtoC scheme proposes a guided busway route from Cambourne to Cambridge which passes through Coton Orchard, and specifically through a line of apple trees. Technical Report 14: Arb Report (**CD11.14.01**) and its appendices provide an assessment of the impacts of the CtoC Scheme on those trees. My evidence directly considers the impact of the scheme on the Bramley apple trees numbered T1 to T14 as shown on plate TR14-4.1 on page 6 of TR14. Plate TR14-4.2 on the following page shows the trees (T5, T6, T7, T8, T9 and T10) within or on the Order Limits, shown as the red lines – see extracted below in Image 4: Para 4.1.8 outlines that compensatory measures have been developed as part of the mitigation strategy in accordance with the NPPF and are produced in TR14.2.

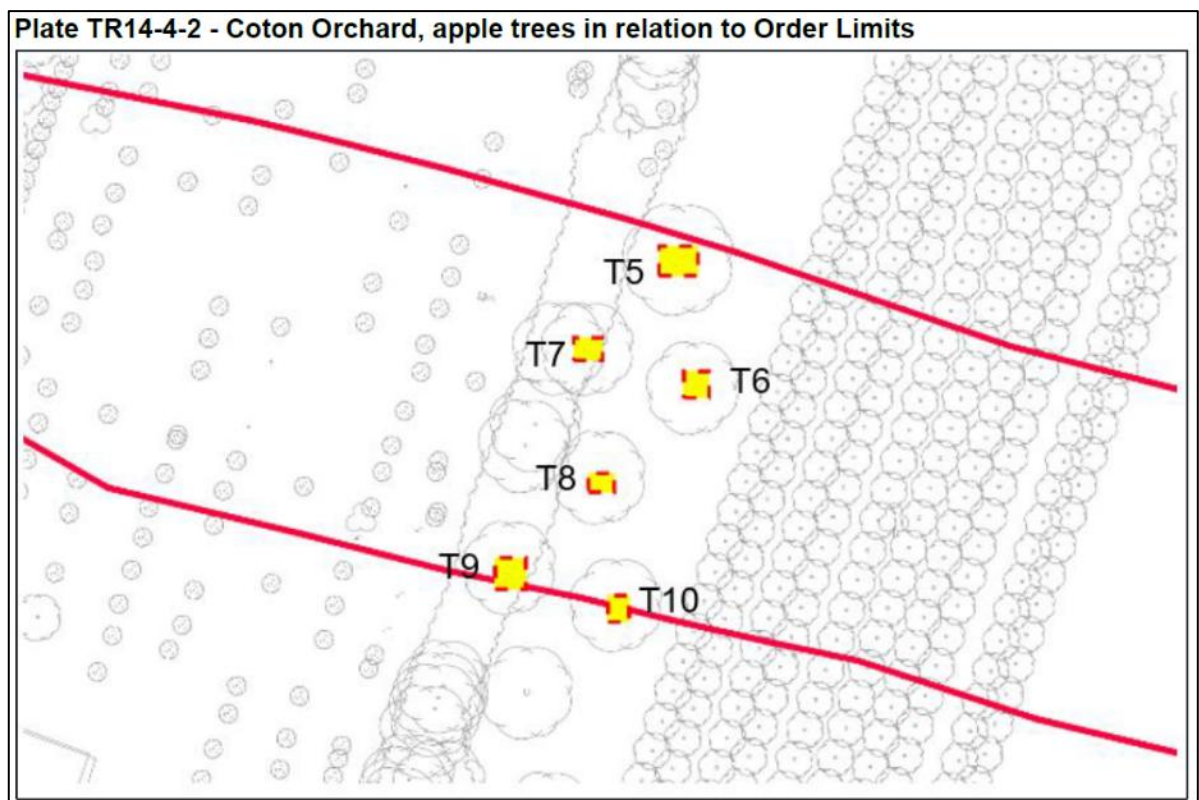


Image 4: Plate TR14-4.2

- 4.2 The trees within the order limits are T6, T7, and T8, with trees T5, T9 and T10 being at the outer edge of the order limits. The retention of trees T5, T9 and T10 can be secured through the installation of tree protective fencing and ground protection, in accordance with the recommendations of BS5837:2012 (**CD21-01**). I am confident this can be achieved without detriment to their health or contribution to local amenity, and a draft Arboricultural Method Statement (AMS) is included at appendix 5 to this proof, to describe the measures employed to secure their successful protection. Trees T6, T7 and T8 are in the middle of the proposed route and so as not to be permanently lost, they can be moved by an expert translocation contractor to a suitable receptor location either within the orchard itself, if the landowner's agreement is given, or failing that, the adjacent Rectory Farm within the order limits (see images 5 and 6 below). The translocation experts have provided an outline methodology for securing the successful movement of the three trees and is included to this proof at appendix 4.

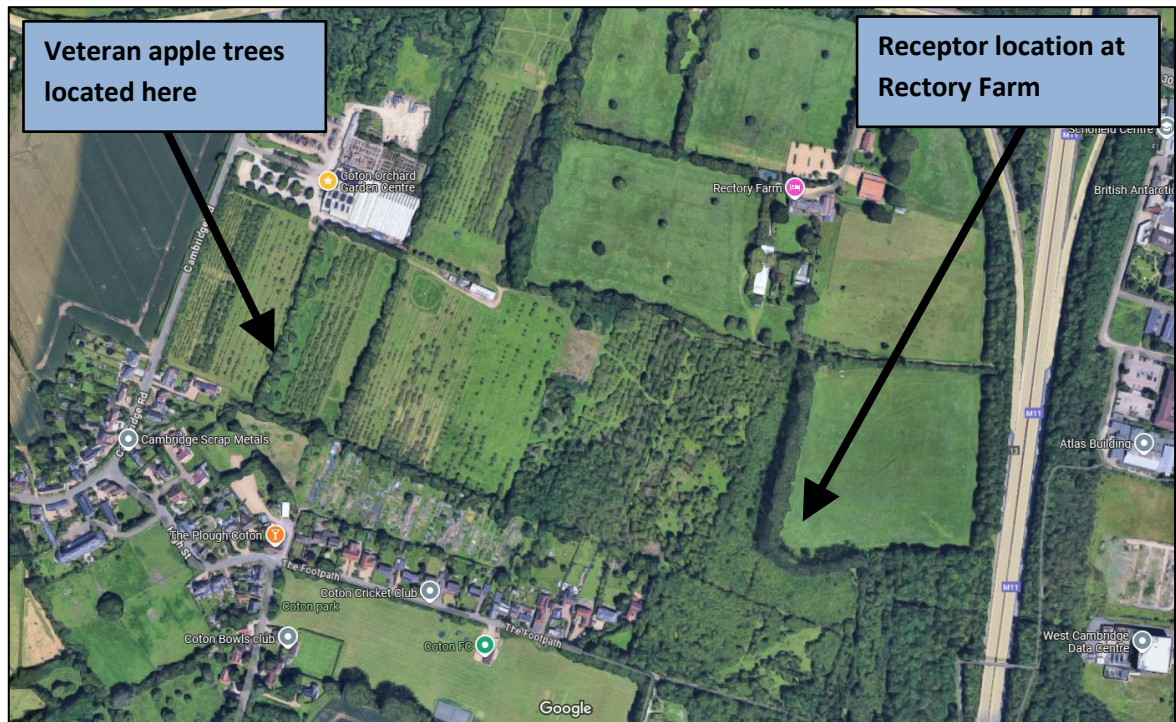


Image 5: Potential receptor site location for translocated trees at Rectory Farm indicated by arrow

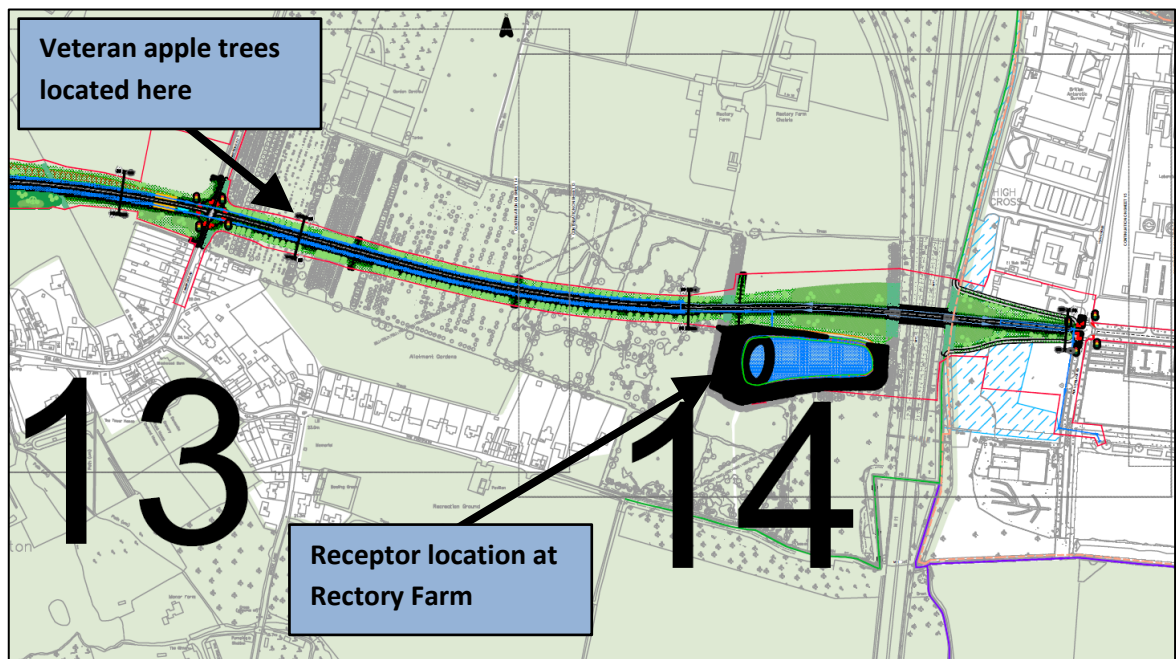


Image 6: Extract from deemed planning drawing proposed site plans (**CD1-16.04**), location of potential receptor site at Rectory Farm indicated with arrow

- 4.3 The Bramley apple trees are in an advanced life stage with evidence of decay, hollowing and associated features such as crown retrenchment which shows a complex colony structure and demonstration of resilience. The trees have passed maturity and are in a process of decline in crown size, have extensive hollowing and associated decay, show a reduction of vigour, all consistent with the characteristics of being veteran trees. Translocating trees T6, T7 and T8 whilst invasive will not have a detrimental impact on the habitat value the trees provide. The trees will continue their ongoing process of progressive decline with associated decay and hollowing, as they

would if left in situ without intervention or management. Bramley apple trees are known to be very vigorous relative to other apple varieties, and in a commercial orchard (although in recent years not subject to intervention) will likely have been subject to regular heavy pruning, intensive grass control measures and pesticide applications. They are known to be resilient and hardy, and respond well to pruning, so are capable of coping with intervention and disruption, such as the proposed translocation.

- 4.4 Ruskins, who are established specialists in tree moving have been engaged to provide an outline methodology (see appendix 3 **CD26-01-APP-W4-2** to this proof) for the preparation of the trees, receptor site, lifting process, planting and support, and long-term post planting maintenance. Ruskins have extensive experience of moving mature apple and fruit trees due to their work in North London for the Orthodox Jewish community, who believe that to harm a fruit tree is no different from harming your fellow man. Ruskins have an in-depth knowledge of fruit tree root systems, and a comprehensive appreciation of the works required to facilitate successful translocation.
- 4.5 Protection of existing trees T5, T9 and T10 within the order limits will be undertaken through a combination of physical barrier installation and ground protection to create a Construction Exclusion Zone (CEZ) for their buffer zone in accordance with Section 6, pages 18-23 of BS5837:2012 (**CD21-01**).
- 4.6 The potential for successful retention depends on the quality of the moving process and methodology. This can be controlled through an Arboricultural Method Statement to include a measurable and time focused monitoring programme. A draft AMS and tree protection plan is included at appendix 4.

5 MITIGATION AND TREE PROTECTION

5.1 Appendix TR14.2 sets out the approach to mitigation and provides a hierarchy in order of priority illustrated in Plate TR14.2-1-1, extracted below in Image 7:

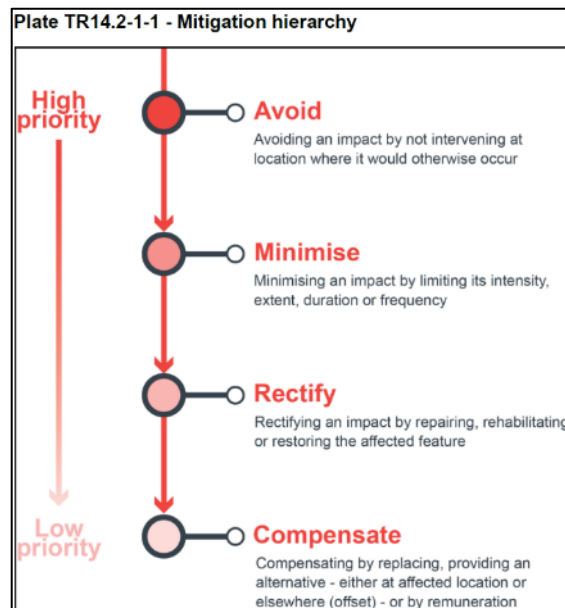


Image 7: Hierarchy of mitigation

5.2 The suite of options to inform a programme of activities to mitigate the impact on irreplaceable habitat. Following my assessment and advice that the trees are all of veteran status, that accord with the NPPF definition, being old enough, large enough and with features characteristic of veteran trees (i.e. their condition) that they should be dealt as such. Translocation of the trees was identified as an option in the TR14.1 submissions, and this is the focus for the management of the trees for the project moving forward.

5.3 It is achievable to avoid any detrimental impact to trees T5, T9 and T10 through the detailed design of the track, the principles of which are set out in Section 9.2 Detailed Design referencing the Code of Construction Practice (**CD1-26, page 40**). Section 9.2 of the Code explains the measures that will be employed to protect retained trees and habitats and includes the following measures to be implemented:

- Provision of appropriate protective fencing to reduce the risks associated with vehicles passing over root systems or beneath canopies;
- Measures to prevent compaction of soils, including undisturbed woodland soils;
- Maintenance of vegetation buffer strips;
- Selective removal of lower branches to reduce the risk of damage by construction plant and vehicles;
- Standard guidance for working within root protection zones, including procedures to follow in the event that significant roots are uncovered during work;
- Provision of contractor guidance for working close to retained aged and veteran trees and areas of retained ancient woodland, and watching briefs as appropriate;

- Maintenance of trees on any highways that are temporarily stopped as a result of the CtoC Scheme works prior to re-opening (e.g. selective branch removal) following consultation and agreement with Shared Planning Service; and
- Monitoring of the effectiveness of the tree protection measures throughout the construction period by an appropriately qualified arboricultural consultant.

5.4 Translocation of trees T6, T7 and T8 is an intensive process requiring works below and above ground, however the impact of such intervention can be managed through effective restoration of the trees in their receptor location. Employing specialist methods designed to alleviate the impact of moving, and then by providing a high quality planting location the trees can be managed to maintain their habitat value and contribution to local ecology.

5.5 The preparation of an Arboricultural Method Statement (AMS) in accordance with Section 6 of BS5837:2012, will be essential to ensure that a precautionary approach to tree protection is adopted. It will demonstrate that operations can be undertaken with minimal risk of adverse impact on retained trees.

5.6 The AMS will fully describe the installation of barriers to establish a construction exclusion zone, installation of ground protection to allow construction traffic access without damaging rooting environments, installation of custom designed surfacing and structures to minimise impact on trees and their rooting environment, and translocation methodology as developed by the specialist contractors. The AMS will normally include an arboricultural monitoring programme (AMP) to describe the schedule of works, and their monitoring and reporting during the construction. This AMP would be read in conjunction with the approved documents. An example of the items included within an AMP are:

5.6.1 Pre-commencement meeting. A pre-commencement meeting will be held on site before any of the site demolition or enabling work begins. Ideally, this will be attended by the site manager, the supervising arboriculturist (SArb) and the LPA tree officer, but if the LPA tree officer is unable to attend the visit, the SArb and the site manager will hold the meeting and the SArb will provide a written summary of the main points to the regulatory authority, with photographs where appropriate. All tree protection measures detailed in the approved reports will be discussed so that all aspects of their implementation and sequencing are understood by the site management team. This will include agreeing the form and precise location of the most appropriate combination of fencing and ground protection to be used as barriers for the CEZs. This meeting is where the details of the monitoring programme will be agreed, which will then form the basis for the further supervision arrangements. Any proposed clarifications or modifications to the consented details will be recorded and circulated to all parties in writing within a target of five working days after the meeting. There will be a presumption that those details are agreed, unless advised to the contrary by the regulatory authority.

5.6.2 Personnel briefing and provision of documents and materials. It will be the responsibility of the site management team to ensure that the details of this AMP and any agreed amendments are known and understood by all site personnel. Copies of the agreed documents will be available on site, and all personnel who could have an impact on trees will

be briefed on the specific tree protection requirements, which will be addressed through the formal induction process. This requirement will be written into the site management documentation.

- 5.6.3 **Supervision visits and reporting.** The SArb will attend regular supervision visits at a period agreed at the pre-commencement meeting, for the duration of the development. The frequency of the visits may need to respond to emerging problems quickly, or less frequent in instances where no activity is occurring near protected trees, if agreed between all parties. Where appropriate, there will be provision within the site scheduling for enough flexibility to allow for the supervision of more sensitive works to coincide with the programmed site visits. Following the pre-commencement visit, the first visit will be to check that any additional measures agreed at the pre-commencement meeting are in place and compliant with the approved documents before any works start on site, followed by the regular periodic visits during the construction process. The SArb will aim to report back to the relevant controlling authority in writing within five working days of each visit and will document the issues in a short supervision record, supplemented with photographic evidence, as appropriate.
- 5.6.4 **Watching brief for sensitive operations.** An arboricultural watching brief is the provision of arboricultural oversight by the SArb for any works within RPAs that could adversely affect retained trees if those works are not carried out properly. This oversight can range from briefing the construction operatives carrying out the work to attending during the work to provide guidance and deal with any issues as they arise. The intention is that this oversight should be fit for the purpose of preventing any harm to retained trees, with its precise form being at the discretion of the SArb.
- 5.7 Paragraph 2.3 of the Veteran Tree Mitigation Strategy TR14.2, sets out the management techniques to be employed to protect and enhance both the above and below ground environment. Improvements to the rooting environment through the use of decompaction measures, appropriate weed control and physical exclusion of damaging practices is sensible and achievable. Above ground measures to prevent disturbance, carry out sensitive and phased pruning, and regular monitoring are all achievable and recognised as the most appropriate management strategies for veteran trees.
- 5.8 Once the busway is operational the maintenance of the retained in situ orchard trees can be undertaken without restriction.

6 TRANSLOCATION METHODOLOGY

- 6.1 Translocation specialist Ruskins have provided an outline methodology for the moving of the three trees and is included at appendix 4, page 8. The main principles are set out below.
- 6.2 Initial root investigation to establish soil characteristics, root system and distribution. This initial investigation will also combine the initial root pruning exercise to stimulate fibrous root growth within the retained rootball. This creates a higher concentration of root mass within the rootball to be moved, and reduces the energy required to repair and defend multiple pruning wounds from subsequent pruning interventions.
- 6.3 The surface of the rootball will be mulched to boost moisture retention and increase microbial and mycorrhizal activity in the retained rootball. Mulching also has the benefit of reducing weed competition and can help with keeping mowers and strimmers way from the base of the tree.
- 6.4 It is usual to apply a treatment to boost micro-organisms within the soil and assist the trees to respond to the intervention works. The health of the trees will be monitored through regular measurements of their health.
- 6.5 Root pruning is carried out over 3 separate events to alleviate the impact and allow the trees to cope with the changes.
- 6.6 The rootball will be incrementally wrapped with hessian and wire and the outward face lined with Air Pot material to prevent girdling root growth. The soil investigations will determine how to manage the drainage from the rootball.
- 6.7 During the periods between the root pruning exercises the trees will be closely monitored and irrigated preferably by an automated system.
- 6.8 Only essential pruning to above ground parts that will not result in deterioration of the trees, will be carried out if necessary to correct any imbalance that may threaten the successful retention of the tree. Otherwise, the crowns will be left intact to maximise photosynthetic capability.
- 6.9 The rootballs once completely wrapped in AirPot will be lifted by a blade driven beneath the rootball, attached to an excavator. This has the benefit have maintaining distance from the machine to the tree, no contact to the stem and no risk of damage to the retained parts of the tree.
- 6.10 An alternative solution, should the blade not be possible, would be to drive a platform of pipes beneath the rootball (sometimes referred to as pipejacking). The pipe platform will then be secured to the rootball , and the whole mass carefully moved without contact directly to the tree.
- 6.11 The planting site will be suitably prepared, having already been tested for soil type, drainage and ph. The trees will be placed and secured with a bespoke guying system. It is anticipated that the above ground guys will be removed after 3 winters, and the below ground guys 2 years later.
- 6.12 Aftercare and monitoring will be required ideally for at least 10 years post translocation and will be reviewed regularly to determine the level of intervention.

7 TRANSLOCATION CASE STUDY

7.1 Genome Campus Mulberry Tree

As referenced in the draft Veteran Tree Mitigation Strategy TR14.2 at para 2.4.3 successful translocation of a mature 100 yr old mulberry tree was undertaken at the Genome Campus near Cambridge. The tree is reported by staff to be alive and well, with a member of staff at the campus reporting in an email (appendix 4 to this proof) dated 4th July 2024 that:

'I can confirm the tree is still alive and well and continuing to go through all its seasonal changes without any ill effects from the move.

The fruiting of the tree has been so successful that one of our restaurants picks the fruit and uses them for meals on site.

We've had no limbs dropping and no dieback so, the preparation that Civic Trees carried out was obviously done so well.'

7.2 An outline of the tree's move is set out in Civic Tree's case study fact sheet at appendix 5. The process involved ground investigation, preparatory root pruning and careful lifting and transportation. The tree was in a conservation area which requires that the LPA tree officer is notified, and raised no objection.

7.3 Mulberry are of similar stature to apple trees, and in this case is of similar age to the apple trees proposed for translocation. If the works follow industry best practice and are carried out by specialist contractors, then in my opinion the trees can be successfully translocated.

8 REPRESENTATIONS

8.1 The Woodland Trust (CD23-20)

8.2 I have assessed the trees as all being of veteran quality, which accords with the Woodland Trust assessment as set out in their Statement of Case (SoC). It is not in dispute that traditional orchards are important, and that Coton Orchard would benefit from management to reduce the impact of encroaching scrub and loss of trees as set out in the Compensation Strategy in TR14.2

8.3 In section 7 of their SoC the Woodland Trust contend that the NE and FC Standing Advice (**CD19.03**) states that translocation as a compensation/mitigation strategy should not be accepted. The section of the standing advice referred to by the Woodland Trust is titled '**Create new native woodland**' (**page 10 of CD19.03**) and deals with trees within a woodland and the impact moving an ancient woodland ecosystem, or relocating individual trees from a woodland which would break connections with the woodland ecosystem. It does not reference trees that are growing outside of a woodland environment. I am not aware of standing advice, guidance or policy that specifically advises against the translocation of individual trees that are growing within a field, orchard, street, or other soft landscaped area that is located outside a woodland. It is not disputed that trees within a woodland are part of an intricate system, providing mutual benefit, and so taking individual trees from a woodland is not advisable. However, that is not the case for what is being proposed at Coton Orchard. The trees to be relocated stand in a grass field, planted in a quincunx matrix common to traditional orchards, however there are significant gaps in the matrix indicating historic losses. The trees are individuals, standing around 12 m apart and as evidenced by their crown shapes do not influence each other in terms of growth.

8.4 The proposal to move them will retain the soil and associated microorganisms within the retained rootball. The location of the receptor site at Rectory Farm is immediately adjacent to the orchard and is of identical soil and environmental conditions to that of the orchard. The trees can be moved within the route limits thereby negating the concerns for restrictions posed by having to move them along public roads. The preferred location for the trees to be moved to would be as close to their current locations as possible within the orchard, thereby minimising the issues suggested by the Woodland Trust in para 7.3 of their SoC concerning severance of historical and cultural links. In my view translocating the trees to either within the orchard or to the receptor site at adjacent Rectory Farm will provide for similar successful results.

8.5 The Ancient Tree Forum (CD2-OBJ-282)

8.6 The objection by Ancient Tree Forum (ATF) relates specifically to the loss of veteran trees. As demonstrated through this proof, the trees will not be lost but will be retained through specialist translocation ensuring their ongoing progressive decline and contribution to biodiversity.

8.7 Cambridge Past, Present and Future (CD2-OBJ-251)

8.8 At paragraph 30 the comments relate to the destruction of wildlife habitat including traditional orchard and veteran trees. The proposal is not to lose any veteran trees, but to relocate three trees thus ensuring their continued contribution to habitat value.

8.9 Coton Orchard Limited

- 8.10 The objection describes the loss of orchard by the busway route and references the presence of the TPO on the veteran trees. Whilst the specific individual trees are not mentioned, I would reiterate that the proposal is not to lose any of the veteran trees.

9 COMPENSATION STRATEGY AND ORCHARD RESTORATION

- 9.1 Section 2 (NPPF Mitigation) of TR14.2 Draft Veteran Tree Mitigation Strategy describes the options available to provide compensation for loss or deterioration.
- 9.2 Orchard Restoration. Paragraph 2.5 of TR14.2 describes the potential for works to be undertaken to improve the orchard through removal of encroaching scrub and thicket species that are currently outcompeting the orchard trees. To avoid losing the priority orchard habitat, removal of the encroaching non-orchard trees could be undertaken. These works would have the benefit of improving the priority orchard habitat and restore those areas lost to scrub back to orchard. It is noted in the document that the areas of the orchard that have succeeded to woodland provide a range of habitat for various species and that works to remove/thin this woodland would reduce this habitat and some nesting territories. The strategy suggests that other areas of existing productive orchard could be managed to improve the veteran-like habitat, subject to agreement with the landowner.
- 9.3 New Planting. Planting young trees of same species as described in paragraph 2.6 would improve connectivity, and diversify age distribution. Orchard trees are relatively short lived, and regular replacement of trees is necessary to provide succession and continuous cover. Orchard pruning practices has characterised the veteran apple trees, and such pruning would be beneficial to new trees to ensure continuity of those important habitat features. New planting to reflect the matrix system could be undertaken in other parts of the orchard, again with the landowner's permission.
- 9.4 Whilst new trees would not be direct replacements, they would have the benefit of contributing to spatial connectivity and age diversity across the orchard.
- 9.5 Monitoring. The process of monitoring is set out in paragraph 2.7, and explains how an ongoing programme of maintenance will be informed by careful observations of the success of the protection of the retained trees. As Ruskins have set out in their methodology, so has TR14.2 set out that 10 years post construction regular inspections and monitoring are essential to continued success of the tree protection.

10. CONCLUSIONS

10.1 Compliance with National Policy

The NPPF says: *When determining planning applications, local planning authorities should apply the following principles:*

- a) *if significant harm to biodiversity resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*

My conclusion: The translocation of three veteran apple trees will not cause significant harm to biodiversity. These trees can in my opinion be carefully moved to be a suitable receptor location in close proximity and of similar environmental conditions, and managed for their future retention. My view is that the remaining trees can be protected in accordance with industry best practice recommendations, without detriment to their long term retention.

- b) *development on land within or outside a Site of Special Scientific Interest, and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted. The only exception is where the benefits of the development in the location proposed clearly outweigh both its likely impact on the features of the site that make it of special scientific interest, and any broader impacts on the national network of Sites of Special Scientific Interest;*

My conclusion: This paragraph does not apply to my evidence.

- c) *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; and*

My conclusion: In response to the requirements of the NPPF I have assessed the Bramley apple trees, and in my opinion, trees numbered T2-T13 on my survey are of veteran status. T1 is a dead stump and T14 does not appear old enough, nor does it have sufficient features to be regarded a veteran. No veteran trees will be lost as a result of the proposals. Three veteran trees T5, T9 and T10 will be protected in accordance with industry guidance thus ensuring their retention is achievable and successful. Protection of these three trees can be achieved through the application of an agreed enforceable AMS detailing the specific measure necessary for their continued retention. Three veteran trees T6, T7 and T8, will be translocated by tree moving specialists with vast experience of undertaking translocation of mature apple trees. Their outline methodology sets out the process and in my opinion it is achievable. There will be no deterioration to T5, T6, T7, T8, T9 or T10.

- d) *development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.*

My conclusion: There is substantial scope to improve and enhance the biodiversity of the orchard where the veteran trees are located. This can be achieved through management of

encroaching scrub and restoration back to an orchard, new planting of orchard trees to provide future potential as veteran trees. Monitoring of works post construction will also ensure the success of any mitigation activities.

10.2 Compliance with Local Development Plan Policy

South Cambridgeshire Local Plan (September 2018) Policy NH/7 Ancient Woodlands and Veteran Trees **(CD6-02)** states:

1. *Planning permission will be refused for development resulting in the loss or deterioration of ancient woodland (as shown on the Policies Map) or veteran trees found outside ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.*

My conclusion: In response, no veteran trees will be lost as a result of the proposal. Existing trees can either be protected in accordance with industry recommendations, or in the case of three trees T6, T7 and T8, will be moved to a suitable location ensuring their continued contribution to local biodiversity.

2. *Development proposals affecting ancient woodland or veteran trees will be expected to mitigate any adverse impacts, and to contribute to the woodlands or veteran tree's management and further enhancement via planning conditions or planning obligations.*

My conclusion: As set out in the mitigation strategy, ongoing monitoring and management will ensure the continued contribution of these trees to local biodiversity.

10.4 Compliance with Local Plan Policy

Cambridge Local Plan (October 2018) Policy 71 Trees **(CD6-01)** states:

Development will not be permitted which involves felling, significant surgery (either now or in the foreseeable future) and potential root damage to trees of amenity or other value, unless there are demonstrable public benefits accruing from the proposal which clearly outweigh the current and future amenity value of the trees. Development proposals should:

- a. *preserve, protect and enhance existing trees and hedges that have amenity value as perceived from the public realm*
- b. *provide appropriate replacement planting, where felling is proved necessary; and*
- c. *provide sufficient space for trees and other vegetation to mature. Particular consideration should be given to veteran or ancient trees, as defined by Natural England, in order to preserve their historic, ecological and amenity value*

My conclusion: In response, no veteran trees will be felled or subject to significant surgery as a result of this proposal. Damage to roots of trees T5, T9 and T10 will be prevented by the installation of recommended protection measures. Trees T6, T7 and T8 will be subject to root pruning, but this is to ensure their long-term establishment in a receptor site. As previously described, root pruning stimulates new root growth, and by following the recommended methodology by the specialist translocation contractors, the trees will

continue to provide contribution to local habitat and biodiversity. New planting is proposed to be undertaken to provide for long term enhancement of the orchard.

10.5 Representations

The representation by the Woodland Trust, the Ancient Tree Forum and others focus on loss of trees, and as previously described, there will be no loss of veteran trees. In my opinion it is achievable to protect and retain the trees, and in the case of three trees translocate them to a suitable receptor site, without deterioration beyond their advanced life stage.

10.6 Concluding remarks

Trees T6, T7 and T8 are directly impacted by the proposed route, and to avoid their loss they will be translocated to an appropriately prepared and suitable receptor site in close proximity and of similar environmental conditions. I do not consider that this will be detrimental to their habitat value or projected life span of 20-40 years. Management of the translocation process will be achieved through adherence to a detailed methodology and appropriate supervision. In response to the requirements of paragraph 193 of the NPPF, the proposal to install the route close to T5, T9 and T10 can be achieved without adverse impacts on their health and longevity. All retained trees will be protected from damage by installation of construction exclusion zone barriers, and specially designed surfacing to prevent deterioration and will be managed through an Arboricultural Method Statement and Monitoring Programme. There is considerable scope for positive orchard restoration management as considered within the compensation strategy in the submissions, which coupled with new planting will significantly enhance and improve the tree cover, diversity and contribution to habitat value. Ongoing monitoring and evidence based management where appropriate is essential to maintain the trees for the future however this will require the landowner's agreement outside the order limits. The success of works within the order limits can be achieved without the compensation strategy being employed.