

LAND OFF TEVERSHAM ROAD, FULBOURN

BS 5837:2012 ARBORICULTURAL METHOD STATEMENT

&

TREE PROTECTION PLAN

REVISION D

PLANNING CONDITION 7 - PLANNING CONSENT REF: S/0202/17/OL

for

Castlefield International Limited

AUGUST 2021

CONTENTS

1.0	Introduction
2.0	Presence of Protected Trees and Tree Groups
3.0	Arboricultural Survey and Assessment
4.0	Arboricultural Method Statement – <i>Terms of Reference</i>
5.0	Arboricultural Method Statement – <i>Pre-Construction Works</i>
6.0	Arboricultural Method Statement – <i>During Construction Works</i>
7.0	Schedule of Tree Protection and Control Measures

References

Figure 01:	Tree Survey Plan
Figure 02:	Tree Protection Plan Rev D
Figure 03:	Tree Removal Plan Rev C
Appendix 1:	TPO and Conservation Area Schedule
Appendix 2:	Legislation in Respect of Trees
Appendix 3:	Prohibited Works within Construction Exclusion Zones
Appendix 4:	Forbes-Laird 2014 Arboricultural Report

Project Ref No:	H75.19d
Author:	Steven Weber BSc (Hons) MCIEEM MArborA
Scientific Check:	Hilary Ludlow MRes CMLI CEnv
Presentation Check:	Zoe Lewis BA (Hons)
Date:	August 2021

1.0 Introduction

Outline planning permission for residential development on Land at Teversham Road, Fulbourn, Cambridgeshire (Planning Application reference: S/0202/17/OL), henceforth referred to as the 'Site', was granted by South Cambridgeshire District Council, subject to conditions, on 26th October 2017.

The principal aim of the AMS and TPP is to detail construction control measures to protect retained trees and tree groups (including hedgerows) within, and adjacent to, the Site in accordance to British Standards (BS) 5837:2012 '*Trees in Relation to Design, Demolition and Construction – Recommendations*'.

The AMS and TPP is supported by a BS 5837:2012 Arboricultural Survey undertaken by Forbes-Laird Arboricultural Consultancy in September 2014 – this report is presented in **Appendix 4**. The Arboricultural Survey was verified by LSC Ltd in July 2019 following a detailed site walkover. No significant changes to the Tree Schedules presented within the Arboricultural Survey were identified.

The AMS and TPP has been produced for the discharge of Pre-Commencement Planning Condition 7 attached to Outline Decision Notice S/0202/17/OL for the Site. In summary, Planning Condition 7 states:

Condition 7

"Prior to the commencement of the development full details of the tree protection measures for all trees and hedges to be retained shall be submitted to and approved in writing by the Local Planning Authority. These measures shall be set out in a detailed Arboricultural Method Statement to include the specification of the location and type of protective fencing, the timings for the erection and removal of the protective fencing, the details of any hard surfacing and underground services proposed within the root protection areas, all to be in accordance with the British Standard for Trees in Relation to Construction 5837: 2012, and the monitoring of tree protection measures during construction. All tree protective measures shall be carried out as set out in the approved Arboricultural Method Statement".

Reason: To protect the visual amenity of the area in accordance with policies.

The boundary of the Site and the associated trees and tree groups as described within this document are plotted on **Figures 01, 02 & 03**. No additional trees or tree groups outside of the Site have been considered within the context of this document.

2.0 Presence of Protected Trees and Tree Groups

TPO trees/tree groups and Conservation Areas are identified on the TPO Plan and Schedule provided in **Appendix 1**. Relevant legislation in respect of TPOs and Conservation Areas is provided in **Appendix 2**.

Permission may be required from the Planning Authority to remove or work on trees protected by TPOs or located in a Conservation Areas, should such works fall outside of the scope agreed and formalised as part of a Planning Consent.

2.1 Tree Preservation Orders (TPO's)

No TPO trees or tree groups are present within the Site.

There are a number of TPO trees and tree groups on, or in close proximity to, the Site boundary, comprising:

- Off the eastern boundary, **G10**, **G12** and **G13** – minor stands of established broadleaf trees along a narrow road;
- Off the southern boundary, **G14** – a group of established broadleaf trees associated with Poorwell Water.

TPO trees and tree groups are present on the adjacent side of Teversham Road to the Site within private gardens; however, given their separation by a highway these trees are not considered in this document any further.

2.2 Conservation Areas

The 'Pump Station' area of the Site, towards the south-west, falls within **Conservation Area A7** and comprises a mix of established broadleaf and coniferous trees around a large pond. In addition, boundary trees along the south-west of the Site form part of the wider Conservation Area A7 designation.

Directly to the east of A7 is **Conservation Area A6** comprising a mix of broadleaf trees. The designation runs along the length of the south-eastern Site boundary, although established trees of merit are presently located directly to the north of Poorwell Water (TPO G14). Much of the area identified as Conservation Area A6 on the Plan provided in **Appendix 1** now comprises residential houses.

3.0 Arboricultural Survey and Assessment

3.1 Overview

The location, number, quality value and Root Protection Area (RPA) of retained trees and tree groups are plotted in **Figure 01** - the Tree Survey Plan. Tree survey parameters are provided in **Appendix 4**.

An Arboricultural Survey was undertaken by Forbes-Laird Arboricultural Consultancy in September 2014 – this report is presented in **Appendix 4**. The Arboricultural Survey was verified by LSC Ltd in July 2019 following a detailed site walkover. No significant changes to the Tree Schedules presented within the Arboricultural Survey were identified. For context, a summary of the Arboricultural Survey is provided below, providing an account of the tree stock prior to development. It should be noted that the Tree Survey Plan within the 2014 report illustrates an older site layout; however, all tree survey data have been superimposed over the most recent site layout submitted for planning in Figure 01.

3.2 Tree Species, Characteristics and Value

The majority of the Site landholding comprises unmanaged meadows with occasional patches of young self-set shrubs within the Category U (Negligible Value) rating.

The Site is bounded throughout by a varied mix of tall, established and prominent broadleaf and coniferous trees, as well as mature and complete hedgerow components. As such, these trees and tree groups have been typically valued as Category B (Moderate Value) specimens in accordance with BS 5837:2012.

Notable tree cover within the Site is predominantly within the 'Pump House' area to the south-west. Given the Conservation Area designation attached to this location and the mature and established nature of the trees present within the group, many of the specimens are valued as Category A (High Value). Numerous specimens within this group are also sub-dominant and neglected; therefore, the Category C (Low Value) has been attached.

A mix of Category B and Category C trees are located to the western extremity of the Site, in proximity to Teversham Road. A mature hedgerow and occasional trees, identified within the Category B value, are located through the centre of the Site along a chalk stream, running north to south.

4.0 Arboricultural Method Statement – Terms of Reference

4.1 Aims and Objectives

This Arboricultural Method Statement (AMS) provides appropriate control measures to protect retained trees and tree groups within, and adjacent to, the Site in accordance with BS 5837:2012. For the context of this AMS ‘trees’ and ‘tree groups’ must also be determined to include hedgerows.

Construction works would proceed following the measures outlined within the AMS. For the purposes of this document ‘construction works’ also includes site investigation and preparation, site clearance and demolition.

This AMS does not include details of tree removal works associated with ecological enhancements for the Site – these proposals are detailed within the submitted Landscape and Biodiversity Management Plan and are not repeated here.

4.2 Applied Methods and Limitations

The boundary of the Site and the associated trees and tree groups as described within this document are plotted on **Figure 02**, the Tree Protection Plan (TPP), which is overlain on the Site Layout. No additional trees or tree groups outside of the Site have been considered within the context of this document.

Based on the LSC verified Forbes-Laird 2014 Arboricultural Report (**Appendix 4**) and following BS 5837:2012 methodology, Root Protection Areas (RPAs) have been calculated for retained trees and tree groups. The RPA’s are plotted on the TPP, **Figure 02**.

A Topographical Plan issued by the client or their representative was used to locate and map all trees and tree groups during the original Arboricultural Survey. It is assumed for the purposes of the AMS and all associated figures that individual tree and tree group locations provided on the Topographical Plan and Forbes-Laird 2014 Arboricultural Report are accurate. It is additionally assumed that the RPA calculations provided in the Forbes-Laird 2014 Arboricultural Report are accurate.

The location of a small number of trees were approximated within the Forbes-Laird 2014 Arboricultural Report and Tree Survey Plan – this was due to their location within inaccessible and overgrown boundaries of the Site. These trees were assessed during the verification survey undertaken by LSC in July 2019 and their individual locations determined to be sufficiently accurate to inform this AMS and TPP.

4.3 Sequence of Events

The chronological stages as set out within the AMS are determined by operational constraints and may be subject to changes as construction works

progress. Any deviation from the control measures outlined within the AMS will be discussed with the Project Arboriculturalist and, if necessary, the Local Planning Authority (LPA), prior to specific works being undertaken.

Inspections by the Project Arboriculturalist will be carried out at the relevant construction stages, as required, to ensure that the objectives of the AMS are met.

The LPA Tree Officer will have free access to the Site at any time and pass any recommendations directly to the Project Arboriculturalist, as required.

4.4 Project Arboriculturalist Competence

The AMS has been completed by Steven Weber BSc (Hons) MCIEEM MArborA who has been undertaking Arboricultural Surveys, Impact Assessments and Method Statements for over ten years.

With regards to BS 5837:2012 competence criteria, Steven is competent in evaluating trees with regards to the species present, the physiological parameters, tree quality, landscape setting, conservation status, assessments of condition, tree constraints/root protection calculations and outlining detailed control measures for tree protection during construction.

Steven is a Professional Member of the Arboricultural Association and a Full Member of the Chartered Institute of Ecology and Environmental Management. Steven also holds the Lantra Professional Tree Inspection certification.

5.0 Arboricultural Method Statement – Pre-Construction Works

This section outlines control measures which must be implemented during the site preparation phase of development, in accordance with BS 5837:2012.

5.1 Preliminaries

5.1.1 Contacts List

The Contacts List is outlined in Table 01, below.

Table 01: Contacts List

Position	Name	Email	Telephone
Project Arboriculturalist	Steven Weber	steven@landscapescienceconsultancy.co.uk	01476 569600
Client/Project Manager	Christopher Lee	christopherlee@hpgl.com	020 7350 5673
Construction Manager	Seamus Porter	SeamusPorter@hpgl.com	020 7350 5654
Tree Officer	Miriam Hill	Miriam.Hill@scambs.gov.uk	01954 713405
Planning Officer	Katie Christodoulides	katie.christodoulides@scambs.gov.uk	01954 713314

5.1.2 Pre-Construction Meeting

A pre-construction meeting will take place between the Construction Manager and Project Arboriculturalist to discuss the programme of works and the timing and implementation of control measures.

5.1.3 Contractor Induction

The key requirements of the AMS will be explained during all site inductions. Trees and tree groups that are to be retained and protected will be identified before works commence. A copy of the AMS and TTP will be retained in the site offices for reference.

5.2 Tree Protection Fencing

5.2.1 Key Constraints from Protection Fencing

In accordance with BS 5837:2012, tree protection fencing must be installed within the Site during the site preparation phase.

The following constraints from protection fencing must be factored into construction management and phasing plans:

- The protection fencing must remain in place for the duration of the construction period and must not be removed without prior approval from the Project Arboriculturalist;

- Land between the protection fencing and retained trees/tree groups, including RPA's, must be treated as **Construction Exclusion Zones (CEZs)** for the duration of the construction period;
- Works within CEZ's are only permitted where control measures have been prescribed within this AMS;
- Additional works within CEZ's are only permitted where the Project Arboriculturalist has prescribed further control measures.

Prohibited works within CEZ's are outlined in **Appendix 3**.

5.2.2 Protection Fencing Layout

The required protection fencing layout is plotted on the TPP - **Figure 02**. The tree protection fencing also encapsulates protection for Grassland/Reptile Retention and Receptor Sites (see submitted Scheme of Grassland Management and Translocation, Planning Condition 14 & Reptile Mitigation Strategy Planning Condition 12) and will also, in part, act as the site perimeter hoarding.

5.2.3 Protection Fencing Specification

The protection fencing will be installed to meet the following specifications:

- Protection fencing will be robust enough to exclude construction works and activity;
- All weather notices will be fixed to the protection fencing stating '*Construction Exclusion Zone- Keep Out*' or similar.

5.2.4 Modifications to Protection Fencing Specification

Any requirement for modifications to the prescribed protection fencing specification, for example where installation space is restricted, will be discussed and agreed with the Project Arboriculturalist before being implemented.

5.2.5 Protection Fencing Inspection

The following measures will be implemented during protection fencing inspection:

- Once installed the protection fencing will be inspected by the Project Arboriculturalist before any construction works begin;
- The Construction Manager will be directly responsible for ensuring the protection fencing remains rigid and complete during the entire works programme;
- Regular inspections will be made by the Construction Manager and the Project Arboriculturalist to ensure that all protection fencing remains fit for the purpose intended;

- Repairs will be authorised by the Construction Manager and acted upon immediately to ensure continued protection.

5.3 Site Compound, Car Parking and Haul Routes

All site compounds, car parking and haul routes will be located outside of tree protection fencing and CEZ's.

5.4 Tree Removal and Pruning

5.4.1 Tree Removal

Trees and tree groups identified for removal are detailed in **Figure 03** – The Tree Removal Plan.

Approximately 30 No trees ranging from young to mature in age are proposed for removal in the western extremity of the Site, to form the main entrance off Teversham Road (Category B & C trees only).

Approximately 12 No young to semi-mature trees are proposed for removal within the 'Pump House' area of the Site, to facilitate the construction of a boardwalk and allow more light into the pond. The 'Pump House' area is located within **Conservation Area A7**. Trees affected are within the B & C (Moderate/Low Value) Categories and typically support impaired conditions. No Category A (High Value) trees will be removed. The proposed very minor proportion of lower value tree removal within the 'Pump House' area of the Site is determined to have a negligible impact on the landscape amenity value of **Conservation Area A7**.

Additional removals will include areas of young, scattered scrub and self-set trees, as well as x3 cut-throughs within the central hedgerow. In addition, a single semi-mature ash tree will require removal along the eastern boundary of the Site to allow for a new vehicular access (ref. 3030).

The proposed tree and shrub removal in the context of the site-wide resource is determined to be minimal. New tree planting is proposed across the completed development site as detailed within the submitted Landscaping Strategy.

Tree removal works must be undertaken by a qualified tree surgeon following BS 3998 (2010): Recommendations for Tree Work.

5.4.2 Tree Pruning

No significant pruning works have been identified at this stage. The Project Arboriculturalist must be informed of, and agree to, proposed pruning works before being carried out.

Pruning works must be undertaken by a qualified tree surgeon following BS 3998 (2010): Recommendations for Tree Work.

6.0 Arboricultural Method Statement – During Construction Works

This section outlines control measures which must be implemented during construction, in accordance with BS 5837:2012.

6.1 Identified Construction Impacts to Retained Trees

Figure 02, the Tree Protection Plan, must be viewed before implementing the control measures outlined below.

The Site Layout been designed to avoid the RPAs of retained trees and tree groups. The submitted drawings as detailed below have been reviewed and direct impacts to RPAs have been determined to be minimal:

- Site Layout;
- Service Plans;
- Cut and Fill Strategy;
- Attenuation Strategy;
- Soft and Hard Landscaping Strategy.

Note: A boardwalk is proposed within the Pump House area to avoid direct excavation impacts to tree roots. Breedon Stone paths will be installed over existing paths or will avoid substantial areas of RPAs.

Minor potential construction impacts to retained trees and tree groups are identified as:

- Cut and fill works associated with preliminary ground works;
- Excavation and ground level changes associated with the construction of access and internal roads/paths;
- Installation of boardwalks and Breedon Stone paths with rills within the 'Pump House' area;
- Minor edging works to ponds walls within the 'Pump House' area;
- General soft landscaping works i.e. grass seeding;
- General construction impacts i.e. movement of plant and materials, to all retained trees and tree groups.

6.2 Control Measures within RPA's/CEZ's

6.2.1 General Excavation Works and Ground Level Changes

IMPACT:

GENERAL EXCAVATION WORKS AND GROUND LEVEL CHANGES WITHIN RPAs/CEZs.

Potential damage and compaction to roots, as well as impact damage to canopies and stems.

AFFECTING:

No significant and/or specific impacts based on submitted Site Layout.

Control measures to be utilised as a precautionary mitigation where potential excavation and ground levels may be required within RPAs and CEZs.

Potential works will be discussed and agreed with the Project Arboriculturalist before being carried out.

Project Arboriculturalist to prescribe specific control measures if and where appropriate.

CONTROL MEASURES:

The following control measures will be implemented:

- Protection fencing will be temporarily removed, allowing sufficient working room only;
- Excavation plant will remain on the ground outside of RPA's and work backwards from the protection fencing;
- Branches which may obstruct the working area will in the first instance be tied back. If this is not possible or practicable, targeted branch reduction pruning will be undertaken removing a minimal amount of woody material to facilitate access. All tree works will be undertaken following BS 3998: 2010 industry best practice;
- Grass swards and soils will be removed slowly and with care in a controlled manner, to prevent damage to potential tree roots below;
- Roots smaller than 25mm will be cleanly pruned back with a sharp cutting tool;
- Roots larger than 25mm will only be removed under the advice of the Project Arboriculturalist;
- Air displacement tools such as air spades are advised to avoid the potential removal of structural roots within the works area;
- Any exposed roots will be immediately covered with topsoil only to prevent desiccation;
- Once the works have been fully completed, the protection fencing will be immediately re-erected **as detailed in Figure 02.**

The following additional control measures will also be implemented:

- Waste materials will not be stored within 10m of retained trees;
- Particular care will be taken to avoid damaging the crowns and stems of trees and hedgerows by the movement of excavators and other plant.

6.2.2 Installation of Boardwalks within the ‘Pump House’ Area

IMPACT:

INSTALLATION OF BOARDWALKS WITHIN ‘PUMP HOUSE’ AREA

Potential damage to trees and compaction to roots as a result of general construction works.

AFFECTING:

Trees and tree groups within the Pump House area.

CONTROL MEASURES:

The following control measures will be implemented:

- Work operations will be planned to reasonably prevent movement of plant, vehicles, workers and storage of materials within the RPA’s of trees and tree groups;
- A single linear haul route will be chosen and delineated with work operations confined to this area as much as is reasonably practicable;
- Light, tracked machinery only will be utilised;
- Test pits for support poles will be dug where tree roots are suspected;
- Roots smaller than 25mm will be cleanly pruned back with a sharp cutting tool;
- Roots larger than 25mm will only be removed under the advice of the Project Arboriculturalist.

6.2.3 Installation of Breedon Stone Paths and Rill within the ‘Pump House’ Area

IMPACT:

INSTALLATION OF BREEDON STONE PATHS WITHIN ‘PUMP HOUSE’ AREA

Potential damage to trees and compaction to roots as a result of general construction works.

AFFECTING:

Trees and tree groups within the Pump House area.

CONTROL MEASURES:

The following control measures will be implemented:

- Work operations will be planned to reasonably prevent movement of plant, vehicles, workers and storage of materials within the RPA’s of trees and tree groups;
- The Excavation and Ground Level Change control measure as detailed in Section 6.2.1 must be followed during all excavation works;
- A single linear haul route will be chosen and delineated with work operations confined to this area as much as is reasonably practicable;
- For the excavation of the rill along the northern-most pathway, follow the excavation control measures in Section 6.2.2;
- Light, tracked machinery only will be utilised.

6.2.4 Pond Edging Repair within the 'Pump House' Area

IMPACT:**POND EDGING REPAIR WITHIN THE 'PUMP HOUSE' AREA**

Works will, at present, only require repairs to pond edging where banks are under significant threat of collapse. No re-grading of the banks is proposed. It possible that a more detailed engineering assessment is needed to assess the scope of works required to make good the pond edging.

Potential damage to tree roots where present within pond edging or where damage to edging is because of tree roots.

AFFECTING:

Trees and tree groups around the pond banks only.

CONTROL MEASURES:

The following control measures will be implemented:

- Work operations will be planned to reasonably prevent movement of plant, vehicles, workers and storage of materials within the RPA's of trees and tree groups wherever possible;
- Light, tracked machinery only will be utilised;
- Repair works will be undertaken by hand;
- Roots smaller than 25mm will be cleanly pruned back with a sharp cutting tool;
- For roots larger than 25mm or where major root growth from trees is the cause of damage to pond banks, the Project Arboriculturalist will advise on how to proceed and, if necessary, produce a separate Method Statement specific to the localised conditions;
- If a more detailed engineering assessment is required, the Project Arboriculturalist will provide a works-specific Method Statement to be submitted to the LPA for approval.

6.2.5 Soft Landscaping

IMPACT:**SOFT LANDSCAPING WORKS WITHIN RPA'S/CEZ'S.**

Potential damage and compaction to roots.

AFFECTING:

All trees, tree groups and hedgerows, particularly during operations such as grass seeding. The works will be undertaken at the end of site construction after all protection fencing has been removed.

CONTROL MEASURES:

The following control measures will be implemented:

- Existing soils will be marginally levelled using hand tools to remove any irregularities;

- Raking and spreading of top-soil will be undertaken by hand and with care, to no more than 50-100mm in depth;
- There will be strictly no movement of plant or storage of works materials and fuels over the top-soiled areas within identified RPA's.

6.3 Control Measures outside RPA's/CEZ's

The protection fencing as detailed in the TPP **Figure 02** will provide sufficient protection for retained trees and tree groups against most direct construction impacts.

The following control measures will also be implemented during construction to mitigate the potential for residual direct and indirect impacts to retained trees and tree groups:

IMPACT:

GENERAL CONSTRUCTION IMPACTS ARISING OUTSIDE OF RPA's/CEZ's.

Potential damage, compaction and toxicity to roots, as well as impact damage to canopies and stems as a result of plant movement and improper storage of works materials and equipment.

AFFECTING:

All trees, tree groups and hedgerows.

CONTROL MEASURES:

- Site operations will be planned to prevent damage to tree canopies from machinery or vehicle movements, particularly for plant with wide or tall loads and booms, jibs and counter-weights;
- Spillage or surface wash of chemicals or fuel towards tree roots will be avoided – spill kits and sufficient water will be located in all site compounds and/or signposted locations;
- The creation of dust and other particulates will be minimised, and if necessary, tree canopies will be hosed down following excessive build-up of dust on foliage;
- Construction materials, fuels, waste and concrete batching station will not be stored within 10m of trees and tree groups unless control measures have been implemented by the Project Arboriculturalist, particularly where trees and tree groups are downslope of such activities.

6.4 Additional Requirements

6.4.1 Damage to Retained Trees and Tree Groups

Should any damage occur to trees and tree groups noted for retention at any time, the damage will be reported to the Construction Manager immediately. The Construction Manager will report up the chain of responsibility and to the Project Arboriculturalist to enable remedial measures to be specified and implemented as appropriate.

6.4.2 Additional Tree Pruning

Any further pruning works required will be discussed with the Project Arboriculturalist before being carried out. Any pruning works to be carried out on trees protected by TPO's or within Conservation Areas may need prior approval from the LPA. Pruning works will be undertaken by a qualified tree surgeon following BS 3998 (2010): Recommendations for Tree Work.

6.4.3 Additional Removal of Trees

No additional trees will be removed without documentary evidence, justification and prior consultation with the Project Arboriculturalist.

7.0 Schedule of Tree Protection and Control Measures

The following chronological schedule is determined by operational constraints and may be subject to changes as the works progress. The Project Arboriculturalist will be informed of all changes that affect works on or near to the trees and tree groups detailed in the AMS and TPP.

The Schedule is provided overleaf.

Works	Responsibility	Notes	Sign-Off and Date (Notes)
Pre-commencement meeting.	Construction Manager and Project Arboriculturalist	To discuss the programme of works, the timing and implementation of the tree works and the tree protection measures.	
Erection and inspection of protective fencing.	Construction Manager and Project Arboriculturalist	Project Arboriculturalist to inspect protection fencing once installed. Construction Manager to act on any recommendations provided.	
Monthly inspections of protection fencing.	Construction Manager and Project Arboriculturalist	Construction Manager to act on any recommendations provided by the project Arboriculturalist.	
Potential excavation works or ground level changes within protection fencing and Construction Exclusion Zones (CEZs).	Construction Manager	Discuss and agree with Project Arboriculturalist and then follow control measures detailed in Section 6.2.1 (or Project Arboriculturalist to prescribe specific control measures).	
Installation of boardwalk and rill within the 'Pump House' area.	Construction Manager	Follow control measures detailed in Sections 6.2.1 & 6.2.2.	
Installation of Breedon Stone Paths within the 'Pump House' area.	Construction Manager	Follow control measures detailed in Section 6.2.3.	
Pond edging repair within the 'Pump House' area.	Construction Manager and Project Arboriculturalist	Follow control measures detailed in Section 6.2.4.	
Soft landscaping within protection fencing and CEZs.	Construction Manager	Follow control measures detailed in Section 6.2.5.	

Works	Responsibility	Notes	Sign-Off and Date (Notes)
Removal of protective barrier fencing.	Construction Manager and Project Arboriculturalist	Only to be removed at the end of the construction period and following authorisation from the Project Arboriculturalist.	

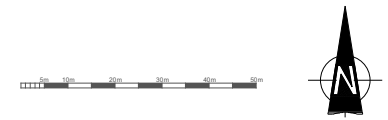
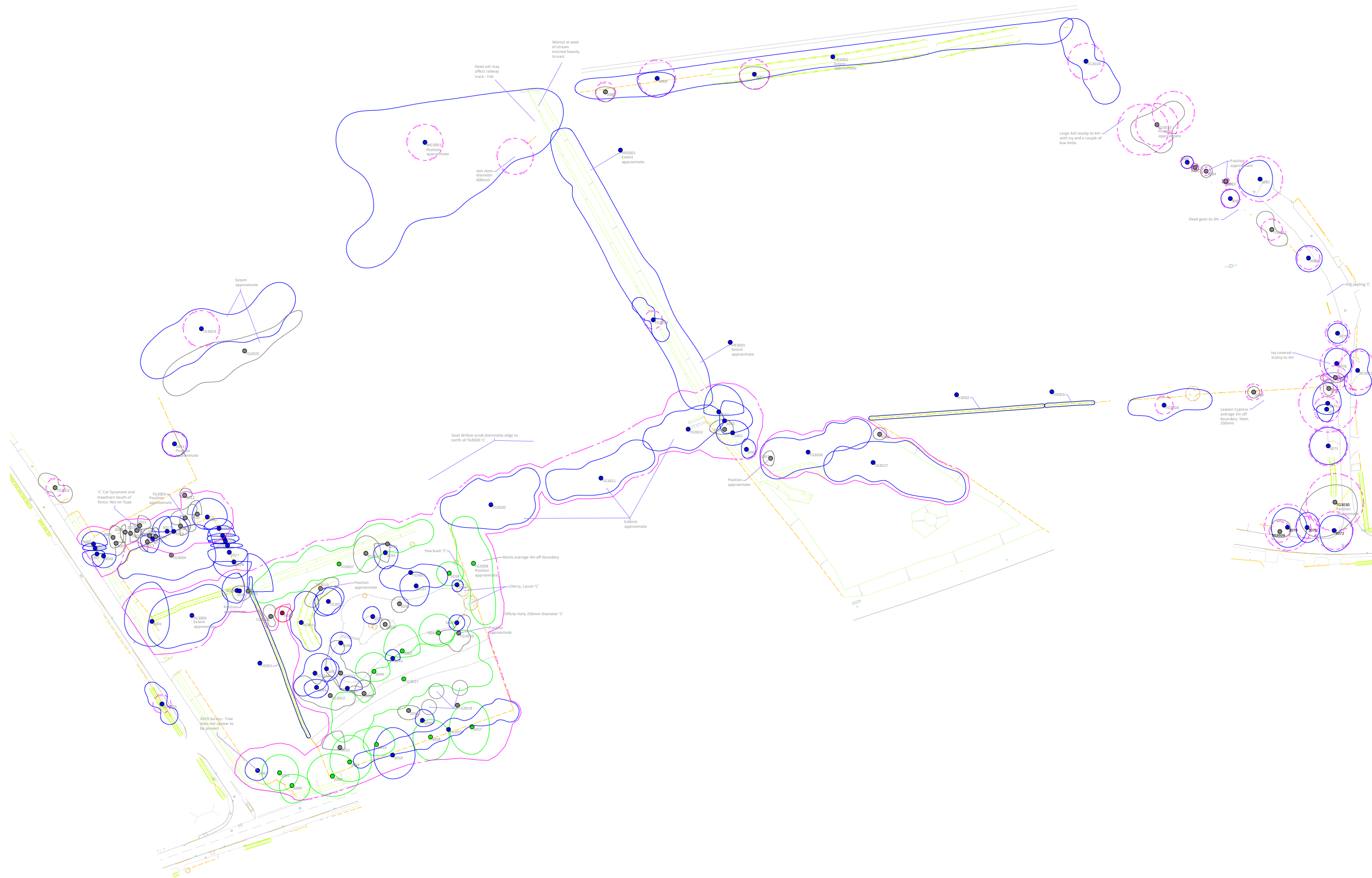
References

British Standards Institute (BSI) (2010). BS 3998 'Tree Works – Recommendations'.

British Standards Institute (BSI) (2012). BS 5837 'Guide for Trees in Relation to Design, Demolition and Construction – Recommendations'.

KEY

- Category A Tree/Group (High Value)
- Category B Tree/Group (Moderate Value)
- Category C Tree/Group (Low Value)
- Category U Tree/Group (Negligible Value)
- Root Protection Area (RPA)



LANDSCAPE SCIENCE CONSULTANCY LTD
 The Old Barracks, Sandon Road
 Grantham, Lincolnshire
 NG31 9AS

01476 569600
 e: admin@landscapescienceconsultancy.co.uk
www.landscapescienceconsultancy.com

PROJECT:
 LAND AT TEVERSHAM ROAD, FULBOURN

TITLE:
 TREE SURVEY PLAN


SCALE: See Scale Bar DATE: 04/09/19
 SOURCE: FORBES-LAIRD DRAWING 34-1018.01

JOB No	Figure No	Revision	Drawing Size
H75.19	01	-	A2

SOURCE REFERENCE : FORBES-LAIRD DRAWING 34-1018.01

KEY

Tree Protection

-  Tree Protection Fencing
 - >Fencing also protects Grassland and Reptile Retention/Translocation Sites.
 - >Fencing layout is illustrative only, see approved fencing specification drawings.
 - >Fencing should be set out by an engineer.
 - >TPP to be read in conjunction with all relevant engineering and architectural drawings and specifications. Any conflicts should be reported to the Project Arboriculturalist.
 - >Contractor to check all dimensions onsite prior to fence installation.

NOTES:

General

1. This TPP and associated Arboricultural Method Statement (AMS) shall be implemented throughout the construction process.
2. The key requirements of this TPP and AMS shall be explained during all formal site inductions.
3. A copy of this TPP and AMS shall be located within the site offices throughout the construction process.
4. Any significant changes to protection measures outlined in this TPP and AMS will be discussed with the Project Arboriculturalist before works are carried out.


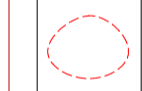

Tree Protection Fencing

1. Protection fencing shall be installed before any site works are carried out and shall remain in place throughout the construction process.
2. The Site Manager shall be responsible for ensuring the protection fencing remains rigid and fit for purpose, ensuring any repairs are undertaken to retain the protective barrier.
3. The protection fencing will not be significantly altered without prior consultation with the Project Arboriculturalist.
4. A specification for the protection fencing is provided within the associated AMS.

Works within Protection Fencing

1. Any works within protection fencing lines shall be discussed with the Project Arboriculturalist and approved before being carried out.
2. Control measures for potential works within protection fencing is provided in the associated AMS.

Tree Removal

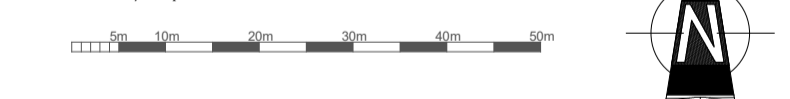
-  Category B Tree/Group Removal
-  Category C Tree/Group Removal
-  Partial Hedge/Scrub Removal

NOTES:
- Scattered scrub encroachment, saplings and young self-set trees are not included on this plan.
- The precise quantity of tree and shrub removal must be determined on the ground - this plan is for illustrative purposes only.
- Tree removal works associated with ecological enhancement are not included on this plan - see the submitted Landscape and Biodiversity Management Plan.

Tree Retention

See KEY provided in FIGURE 01.

REVISIONS:
Rev A - 20/02/2020 - Amended site layout referenced
Rev B - 11/04/2020 - Additional text for Pump House Gardens
Rev C - 09/06/2021 - Amended site layout and fencing for grassland/reptile retention/receptor sites



LANDSCAPE SCIENCE CONSULTANCY LTD
The Old Barracks, Sandon Road
Grantham, Lincolnshire
NG31 9AS

01476 569600
c: admin@landscapescienceconsultancy.co.uk
www.landscapescienceconsultancy.com

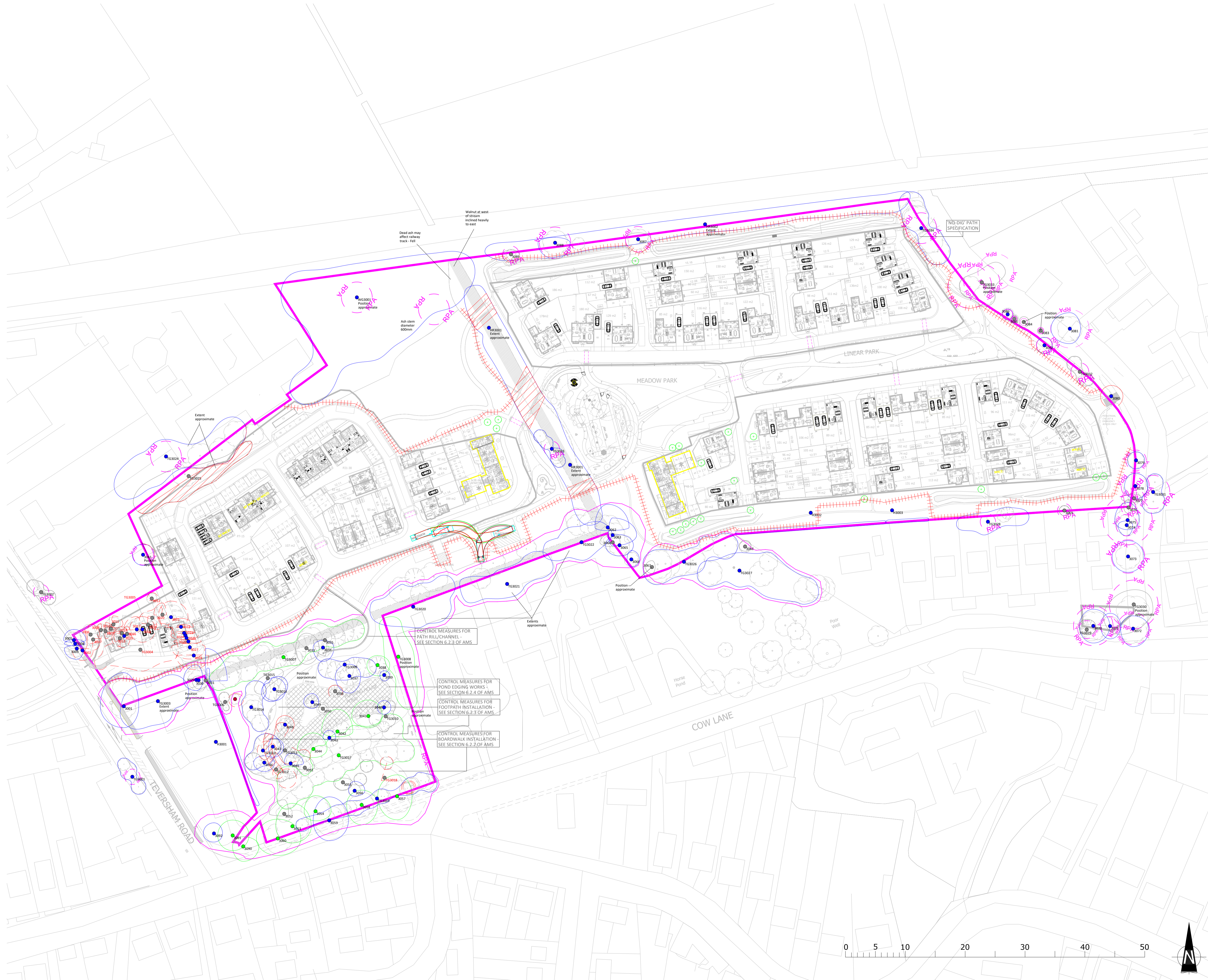
PROJECT:
LAND AT TEVERSHAM ROAD, FULBOURN

TITLE:
TREE PROTECTION PLAN

SCALE: See Scale Bar DATE: 06/08/2021

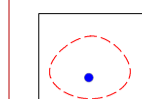
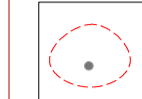
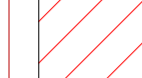
SOURCE: Tree Survey Plan - Forbes-Laird DWG 34-1018.01
Submitted Site Layout (Barton Wilmore)

JOB No	Figure No	Revision	Drawing Size
H75.19d	02	D	A1



KEY

Tree Removal

-  Category B Tree/Group Removal
-  Category C Tree/Group Removal
-  Partial Hedge/Scrub Removal

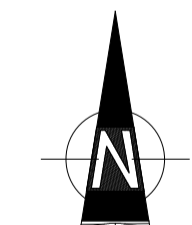
NOTES:
 - Scattered scrub encroachment, saplings and young self-set trees are not included on this plan.
 - The precise quantity of tree and shrub removal must be determined on the ground - this plan is for illustrative purposes only.
 - Tree removal works associated with ecological enhancement are not included on this plan - see the submitted Landscape and Biodiversity Management Plan.

Tree Retention

See KEY provided in FIGURE 01.



REVISIONS
 Rev A - 28/02/2020 - Ammended site layout referenced
 Rev B - 09/06/2021 - Ammended site layout added



LANDSCAPE SCIENCE CONSULTANCY LTD
 The Old Barracks, Sandon Road
 Grantham, Lincolnshire
 NG31 9AS
 01476 569600
 c: admin@landscapescienceconsultancy.co.uk
www.landscapescienceconsultancy.com

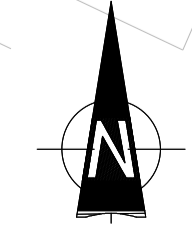
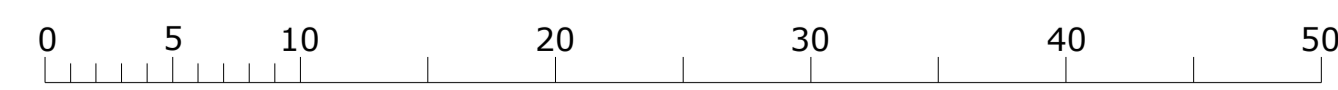
PROJECT:
 LAND AT TEVERSHAM ROAD, FULBOURN

TITLE:
 TREE REMOVAL PLAN

SCALE: See Scale Bar **DATE:** 06/08/2021

SOURCE: Tree Survey Plan - Forbes-Laird DWG 34-1018.01
 Submitted Site Layout (Barton Wilmore)

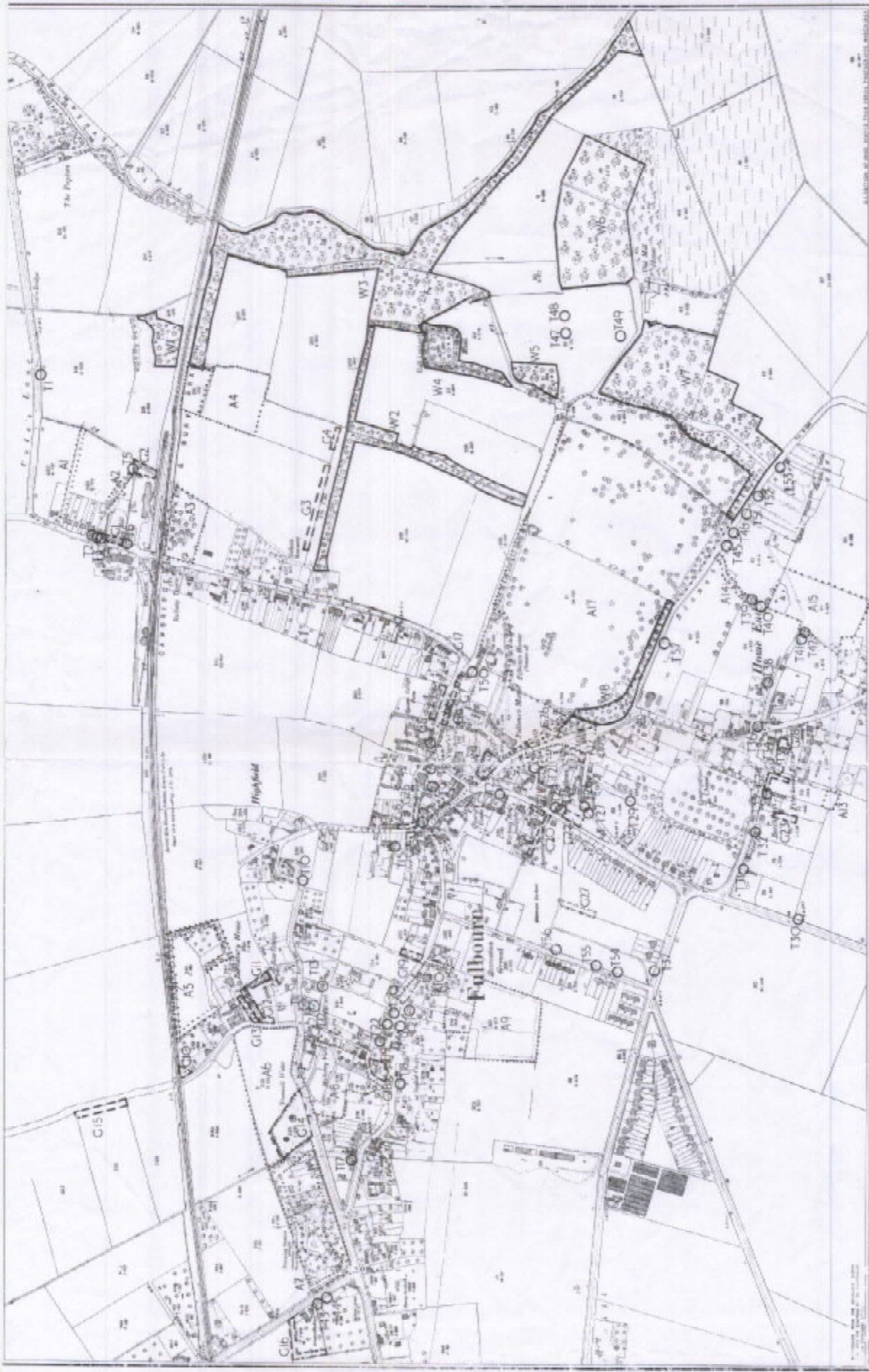
JOB No	Figure No	Revision	Drawing Size
H75.19d	03	C	A1




APPENDIX 1

-

TPO & CONSERVATION AREA SCHEDULE









COUNTY OF

CAMBRIDGE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

-  Areas-A1-17
Area A1-17 of the Fulbourn Conservation Area
-  Groups-G1-28
Group G1-28 of the Fulbourn Conservation Area
-  Individual Trees-T1-57
T1-T57 of the Fulbourn Conservation Area
-  Woodlands-W1-9
W1-W9 of the Fulbourn Conservation Area

FULBOURN

TOWN & COUNTRY PLANNING ACT 1962

Town & Country Planning (Tree Preservation Order) Regulations 1950.

TREE PRESERVATION ORDER NUMBER B/63

<u>No. on Map</u>	<u>Description</u>	<u>Situation</u>
T1	Elm	North boundary of O.S.P. 219 fronting Coles Lane
T2	Horse Chestnut	Road frontage of "Westley" Wilbraham Road
T3	Horse Chestnut	Road frontage of No. 8, Wilbraham Road
T4	Horse Chestnut	Road frontage of No. 6, Wilbraham Road
T5	Lime	South corner of O.S.P. 222 near Fulbourn Silo, Wilbraham Road
T6	Horse Chestnut	Road frontage of Fulbourn Silo, Wilbraham Road
T7	Copper Beech <i>Red Robin & Hill 1/2/2002</i>	Road frontage of Queen's College Farm, Church Lane
T8	Plane	Road frontage of The Old Rectory
T9	Walnut	Garden of The Old Rectory
T10	Walnut	S.W. corner of No. 5 Cow Lane
T11	Horse Chestnut	Front garden of No. 31 Cow Lane
T12	Sycamore	Front garden of No. 31 Cow Lane
T13	Sycamore	Garden of No. 27 Cow Lane
T14	Horse Chestnut	St. Osyth, Apthorpe Street
T15	Sycamore	Highfields Farm, Apthorpe Street
T16	Sycamore	Garden of No. 23 Pierce Lane
T17	Walnut	South Boundary of O.S.P. 234 opposite Birds Farm, Pierce Lane
T18	Lime	Road frontage of "Llangurn", Pierce Lane
T19	Sycamore	Road frontage of Myrtlebury Stores, Pierce Lane
T20	Ash	Road frontage of No. 23 Pierce Lane
T21	Walnut	Garden of No. 21 Pierce Lane
T22	Sycamore	Garden of No. 25 Pierce Lane
T23	Sycamore	Home Farm, No. 6 School Lane

10/6
20/6

TREES SPECIFIED INDIVIDUALLY (encircled in black on the map)

<u>No. on Map</u>	<u>Description</u>	<u>Situation</u>
T24	Scots Pine	Garden of No. 4 Ludlow Lane
T25	Poplar	Garden of No. 4 Ludlow Lane
T26	Scots Pine	Garden of No. 4 Ludlow Lane
T27	Scots Pine	Garden of No. 4 Ludlow Lane
T28	Walnut	Garden of Hall Farm, School Lane
T29	Sycamore	Boundary hedge of No. 5 Ludlow Lane between between O.S.P. 62 and O.S.P. 63
T30	Elm	N.W. corner of O.S.P. 111 fronting Babraham ^{Willoraham} Road
T31	Elm	N.E. corner of O.S.P. 79 fronting Doggetts Lane
T32	Elm	N.W. corner of O.S.P. 75 fronting Doggetts Lane
T33	Beech	Road frontage of "Beechcroft" Doggetts Lane
T34	Sycamore	College Farm, east side of entrance to Sanders Lane
T35	Elm	College Farm, east side of entrance to Sanders Lane
T36	Copper Beech	Garden of 25 Home End
T37	Elm	Road frontage of No. 22 Cambridge Road
T38	Elm	Garden of No. 3 Impett's Lane
T39	Elm	N.E. corner of Recreation Ground
T40	Elm	N.E. corner of Recreation Ground
T41	Ash	Road frontage of O.S.P. 91 with Impett's Lane
T42	Ash	Road frontage of O.S.P. 91 with Impett's Lane
T43	Ash	Road frontage of "Villette" Teversham Road
T44	Sycamore	Road frontage of O.S.P. 368 Teversham Road
T45	Horse Chestnut	Road frontage of O.S.P. 53 with Stonebridge Lane

FIRST SCHEDULE (Cont.)

411/17/31/5
346

TREES SPECIFIED INDIVIDUALLY (encircled in black on the map)

<u>No. on Map</u>	<u>Description</u>	<u>Situation</u>
T46	Horse Chestnut	Road frontage of O.S.P. 53 with Stonebridge Lane
T47	Oak	Centre of O.S.P. 33 Fulbourn Manor
T48	Oak	Centre of O.S.P. 33 Fulbourn Manor
T49	Elm	South part of O.S.P. 33 Fulbourn Manor
T50	Horse Chestnut	Outside No. 4 Church Lane
T51	Horse Chestnut	Road frontage of No. 6 Stonebridge Lane
T52	Horse Chestnut	Road frontage of "Woodside" Stonebridge Lane
T53	Horse Chestnut	Road frontage of No. 16 Stonebridge Lane
T54	Sycamore	Road frontage of No. 33 Haggis Gap
T55	Elm	Road frontage of Recreation Area with Haggis Gap
T56	Sycamore	Road frontage of No. 23 Haggis Gap
T57	Scots Pine	Front garden of No. 2 Stonebridge Lane

TREES SPECIFIED BY REFERENCE TO AN AREA (within a dotted black line on the map)

A1	The several Elm and Ash within the Area marked A.1 on the map	North boundary of O.S.P. 222 with O.S.P. 220 east of Wilbraham Road and south of Coles Lane
A2	The several Elm, Ash and Poplar within the Area marked A2 on the map	South boundary of O.S.P. 222 near Fulbourn Silo, Wilbraham Road
A3	The several Elm, Grey Poplars and Oak within the Area marked A3 on the map	The paddock of No. 93 Station Road
A4	The several Ash, Oak, Elm, Walnut and Maple within the Area marked A4 on the map	Parts O.S.P.s 280 and 281 on the south side of the railway
A5	The several Lime, Horse Chestnut, Black Poplars, Ilex, Beech, Copper Beech, Walnut, Ash and Elms within the Area marked A5 on the map	Parts O.S.P.s 249 and 247 Holly Lodge, Cox's Drove

FIRST SCHEDULE (Cont.)

C/11/17/315
4-6

TREES SPECIFIED BY REFERENCE TO AN AREA (within a dotted black line on the map)

<u>No. on Map</u>	<u>Description</u>	<u>Situation</u>
A6	The several Willows, Thorns, Horse Chestnuts, Sycamore, Elms and Oaks within the Area marked A6 on the map	O.S.P. 232 east of Poorwell Water
A7	The several Black Poplars, Scots Pine, Lime, Sycamore, Beech, Cypress and Ash within the Area marked A7 on the map	Grounds of The Pumping Station, Cow Lane
A8	The several Ash, Sycamore and Yew, Birch, Irish Yew and Macrocarpa within the Area marked A8 on the map	Grounds of Home Close otherwise Mulberry Villa
A9	The several Poplars, Macrocarpa, Scots Pine, Wych Elm, Horse Chestnut and Thorns within the Area marked A9 on the map	O.S.P. 301 and Part O.S.P. 299 No. 15 Pierce Lane
A10	The several Limes, Sycamore, Elms, Yews and Horse Chestnuts within the Area marked A10 on the map	Part O.S.P. 298, road frontage of No. 15 Pierce Lane
A11	The several Elms, Beech and Hornbeam within the Area marked A11 on the map	Grounds of Hall Farm (Manor Walk frontage)
A12	The several Horse Chestnuts Elms, Sycamore, Copper Beech and Thorns within the Area marked A12 on the map	Road frontage of Ludlows, Manor Walk
A13	The several Elms within the Area marked A13 on the map	South end of O.S.P. 72 south of Doggett's Lane
A14	The several Elms, Thorns and Willows within the Area marked A14 on the map	S.E. boundary of O.S.P. 57 Stonebridge Lane
A15	The several Ash, Thorns, Sycamore, Elm and Oaks within the Area marked A15 on the map	O.S.P. 93 east of Impett's Lane
A17	The several Horse Chestnuts, Elms, Ash, Oak, Lime, Sycamore and Thorn within the Area marked A17 on the map	Fulbourn Manor Park O.S.P.s 46 and 32, and parts O.S.P.s 52, 31 and 290

GROUPS OF TREES (within a broken black line on the map)

G1	Group consisting of 3 Horse Chestnuts	Road frontage east of The Silo, Wilbraham Road
G2	Group consisting of 6 Ash, 1 Oak, 1 Elm and 1 Lime	Parts O.S.P.s 223, and 218 Fulbourn Silo

FIRST SCHEDULE (Cont.)

GROUPS OF TREES (within a broken black line on the map)

<u>No. on Map</u>	<u>Description</u>	<u>Situation</u>
G3	Group consisting of 14 Elms	North of O.S.P. 279 east of Hay Street
G4	Group consisting of 2 Elms and 1 Maple	South boundary of O.S.P. 280 east of Hay Street
G5	Group consisting of 2 Red Horse Chestnut and 1 Ailanthus	Green fronting Almshouses, Church Lane
G6	Group consisting of 3 Limes and 1 Horse Chestnut	Road frontage of The Manor Lodge with Church Lane, next to Graveyard
G7	Group consisting of 7 Limes	Road frontage of The Manor Lodge with Church Lane, east of entrance to the Manor
G8	Group consisting of 7 Limes	Frontage of The Rectory with Apthorpe Street
G9	Group consisting of 4 Birch	Road frontage of No. 5 Apthorpe Street
G10	Group consisting of 4 Birch	N.W. corner of O.S.P. 248, Cox's Drove
G11	Group consisting of 3 Sycamore	Humphreys Green
G12	Group consisting of 10 Horse Chestnuts and 3 Limes	South side of driveway to Holly Lodge otherwise Barnsbury House
G13	Group consisting of 1 Copper Beech, 1 Horse Chestnut and 1 Lime	North side of driveway to Holly Lodge otherwise Barnsbury House
G14	Group consisting of 2 Ash, 1 Elm, 2 Sycamore, 3 Limes and 2 Italian Black Poplars	O.S.P. 233 Poorwell Water
G15	Group consisting of 5 Ash and 6 Elm saplings	East boundary of O.S.P. 228 Cox's Drove
G16	Group consisting of 4 Sycamore, 3 Ash, 1 Birch and 1 Willow	N. and W. boundaries of O.S.P. 367 Teversham Road
G17	Group consisting of 4 Birch	Front garden of No. 1 Station Road
G18	Group consisting of 1 Ash, 1 Sycamore and 1 Walnut	Part O.S.P. 304, Pierce Lane
G19	Group consisting of 2 Elms and 1 Ash	West boundary of O.S.P. 255 Pierce Lane
G21	Group consisting of 4 Limes	Frontage of the School House
G22	Group consisting of 3 Scots Pine	Garden of No. 6 Ludlow Lane, frontage with School Lane
G23	Group consisting of 1 Sycamore and 2 Walnuts	Garden of "Whiteacre" Doggetts Lane

C/M/17/31/15 546

FIRST SCHEDULE (Cont.)

C/11/17/3/5

646

GROUPS OF TREES (within a broken black line on the map)

<u>No. on Map</u>	<u>Description</u>	<u>Situation</u>
G24	Group consisting of 8 Limes	North boundary and part of east boundary of O.S.P. 72 Doggetts Lane
G25	Group consisting of 5 Limes	South boundary of Rectory Garden
G26	Group consisting of 7 Sycamore 5 Horse Chestnuts, 2 Planes and 1 Oak	Ludlow Green on east side of Manor Walk
G27	Group consisting of 4 Sycamore	Boundary hedge of Council Estate St. Vigor's Road
G28	Group consisting of 2 Yews and 1 Weeping Ash	Lawn of College Farmhouse

WOODLANDS (within a continuous black line on the map)

W1	Mixed hardwoods consisting mainly of Oak, Ash, Elm and Poplar	O.S.P. 216 North of Railway
W2	Mixed hardwoods and conifers consisting mainly of Poplar Elm, Ash, Sycamore, Larch and Austrian Pine	O.S.P. 287 Fulbourn Manor
W3	Mixed hardwoods consisting mainly of Maple, Ash, Alder, Lime, Sycamore, Willows and Oak	The Cringles, Fulbourn Manor
W4	Mixed hardwood and Conifers consisting mainly of Elm, Larch and Austrian Pine	The Moat, O.S.P. 285 Fulbourn Manor
W5	Hardwoods consisting mainly of Elms	O.S.P. 21 Fulbourn Manor
W6	Mixed hardwoods consisting mainly of Oak, Beech, Birch, Elm and Ash	O.S.P.s 34 and 35 Fulbourn Manor
W7	Mixed hardwoods consisting mainly of Oak, Beech, Sycamore Elm and Ash	O.S.P.s 43 and 48 and Parts O.S.P.s 44, 46 and 52 Fulbourn Manor
W8	Mixed hardwoods consisting mainly of Horse Chestnut and Elm	Part O.S.P. 58 Ludlow Green and Stonebridge Lane
W9	Mixed hardwood consisting mainly of Elm and Beech	Monks Barn, Fulbourn Manor

APPENDIX 2
-
LEGISLATION IN RESPECT OF TREES

A2.1 Tree Preservation Orders

A Tree Preservation Order (TPO) is an order made by a Local Planning Authority (LPA) in respect of trees and woodland. The main legislative tools for TPO's are covered in Part VIII of the Town and Countryside Planning Act 1990 and the Town and Country Planning (Tree Preservation Orders) (England) Regulations 2012. Other legislative tools which have updated the 1990 Act include Section 192 of the Planning Act 2008 and Part 6 of the Localism Act 2011.

The principal effect of a TPO is to prohibit the:

- Cutting down, uprooting, topping, lopping and;
- The wilful damage or wilful destruction of trees without the LPA's consent.

The cutting or compaction of roots is potentially damaging and so, in the view of the Secretary of State, requires the LPA's consent. Any works which may affect trees or woodland under a TPO will require consent from the LPA before the development works take place, unless the works can meet strict exemptions criteria.

The Town and Countryside Planning Act 1990 also places a duty on LPA's so that, in granting planning permission for any potential development:

"Adequate provision is made, by the imposition of conditions, for the preservation or planting of trees".

Where it is considered 'expedient' to do so, LPA's can serve a TPO(s) on trees to protect their amenity value from potential threat of development.

A2.2 Conservation Areas

Section 211 of the Town and Countryside Planning Act 1990 makes special provision for trees in Conservation Areas which are not the subject of TPO's. Under Section 211, subject to a range of strict exemptions, landowners proposing to cut down, top or lop a tree in a Conservation Area are required to give six weeks' notice to the LPA. This is to allow the LPA to decide whether the trees should be subject to the provisions of a TPO.

A2.3 Felling Licenses

A Felling Licence may be required when the proposed volume of timber to be removed exceeds a specified amount. The Forestry Commission administers Felling Licences under the Forestry Act 1967. There are number of general exemptions where a Felling Licence would not be required. With respect to development, the principle exemption is:

"Felling trees immediately required for the purpose of carrying out development authorised by planning permission (granted under the Town and Country Planning Act 1990) or for work carried out by certain providers of gas, electricity and water services and which is essential for the provision of these services".

APPENDIX 3

-

PROHIBITED WORKS WITHIN CONSTRUCTION EXCLUSION ZONES

PROHIBITED WORKS WITHIN CONSTRUCTION EXCLUSION ZONES

The following works are **prohibited** within Root Protection Areas and protection fencing of retained trees and tree groups (Construction Exclusion Zones), unless specific control measures are outlined within the Arboricultural Method Statement.

Additional works within Construction Exclusion Zones are only permitted where the Project Arboriculturalist has prescribed further control measures.

Note that the below list of prohibited works is not exhaustive.

- No mechanical or manual excavation, digging or demolition;
- No storage of plant, equipment or materials;
- No vehicle access;
- No fire lighting: No fires will be lit in a position where the flames could extend to within 15m of foliage, branches or trunk (this will depend on the size of the fire and the wind direction);
- No handling, discharge or spillage of any chemical substance including cement mixing, cement washings and builders sand;
- No action likely to cause water logging;
- No change to ground levels;
- No construction of hard surfaces;
- No notice boards, cables or other services will be attached to any part of a retained tree.

APPENDIX 4
-
FORBES-LAIRD 2014 ARBORICULTURAL REPORT

Principal Consultant:

Julian Forbes-Laird

BA(Hons), MICFor, MRICS, MEWI, M.Arbor.A, Dip.Arb.(RFS)

Forbes- Laird Arboricultural Consultancy



LAND OFF TEVERSHAM ROAD,
FULBOURN



PLANNING SUBMISSION
(ARBORICULTURE)



-TREE SURVEY TO BS5837:2012
-PROPOSALS FOR TREE RETENTION/
REMOVAL
(ILLUSTRATIVE)



Prepared for: Castlefield International Ltd

FLAC Instruction ref: CC34-1018

Issued: September 2014



Associate Directors:

Patrick Stileman

BSc(Hons), MICFor, Dip.Arb(RFS), M.Arbor.A

Ben Abbatt

BA(Hons), MICFor, MRICS, CEnv, M.Arbor.A, Dip.Arb (RFS)

Executive Consultant:

Richard Nicholson

B.Ed, F.Arbor.A, Dip.Arb.(RFS)

Dendron House
Barford Road • Blunham
Bedford • MK44 3ND
T 44 (0)1767 641648
F 44 (0)1767 660330
E enquiries@flac.uk.com
www.flac.uk.com

TEVERSHAM ROAD, FULBOURN : KEY TO TREE SURVEY DATA SCHEDULE

Note

This survey has been undertaken in compliance with BS5837:2012; it is not intended to be a tree safety survey. Any notes offered on structural integrity of trees are incidental, though where trees are considered to be in immediately hazardous condition (identified by red font in the *Structural condition & Notes* column, see below), our recommendations given for immediate intervention should be put in hand by the owner / site manager as soon as can be arranged.

Trees are dynamic living organisms capable of achieving considerable size and structural complexity. They are exposed to and can become damaged by the elements and by human activity, and have co-evolved with decay-causing organisms that can degrade and sometimes destroy their structural integrity. Due to genetic characteristics and local microenvironmental factors this integrity can be innately uncertain. The laws and forces of nature dictate a natural failure rate even among trees that are healthy and structurally sound. By their very nature, therefore, trees cannot be considered entirely hazard-free.

Tree surveys and / or tree inspections are, inherently, only a snapshot in time of the physiological and structural condition of the trees concerned.

Unless otherwise stated in our reporting material, all such surveys and inspections are undertaken from ground level and no internal inspections or tests have been undertaken. Any structural defects present might not be visible, for example being masked by vegetation, whether the tree's foliage, plants growing round the base of the tree, or climbing plants growing on the stem and into the crown.

Unless otherwise stated, the survey data should be considered time-limited **for planning purposes** to a maximum of three years (absent revisions of BS5837, which render pre-existing data obsolete).

FLAC Ref. No.

Tree numbers per FLAC dwg no. 34-1018.01 and subsequent drawings

In line with the advice of BS5837:2012, where trees occur as a cohesive group feature (prefixed TG for tree group or WG for woodland group), they are assessed as such

Size data for TG or WG are given as mean figures for trees at roughly the 80 percentile of the population concerned. Trees in the 90-100 percentile range for the group are identified on the TSP

Trees within TG / WG boundaries that have more than one stem and which are sub-dominant within the TG / WG (i.e. <80 percentile) are subsumed within the TG / WG data; dominant multi-stemmed trees (i.e. >80 percentile) within TG / WG boundaries are listed as individual trees

TG / WG outlines follow the mapping base (typically either topographical survey or geo-rectified aerial imagery)

Hedges (domestic) are recorded prefixed H and are always excluded from the provisions of the Hedgerows Regulations 1997

Hedgerows (rural) are recorded prefixed HR and possibly fall within the provisions of the Hedgerows Regulations 1997

All numbering starts from x001 **for each type of vegetation**, where x identifies the surveyor (9000 series = JFL). Thus:

9000	Individual tree
TG9000	Tree group
WG9000	Woodland group
H9000	Domestic hedge
HR9000	Rural hedgerow

The addition of the FLAC instruction ref. ahead of the tree number provides a unique, non-repeated reference number for the particular tree in question

Any trees omitted from the topo survey are listed on the referenced plan, though their positions are only shown indicatively. Off-site trees are included where deemed relevant, though their positions are also shown indicatively if omitted from the topo base

TPO Ref.

Statutory protection listing for individual trees, TG and WG.

The site is subject to statutory tree protection by the Tree Preservation Order (TPO) referable as *The County of Cambridge Tree Preservation Order Number 8 of 1963, Fulbourn* (of which the Schedule and Map are included, following).

This TPO protects trees on site within two Areas, A6 and A7, and certain off-site trees covered by our tree survey as groups, G12, G13 and G14.

The Area designation protects only those trees present on site when the Order was made, such that trees arising after 1962 are not protected by it.

Area 7 appears to be defined on the TPO Map a ring of dots with a second ring of dots internally so as to form a looped area that excludes the central zone. We have taken a precautionary approach when discounting trees or groups because the plan is somewhat unclear.

Due to this uncertainty, we have included 3001 as part of A7, thereby giving it the benefit of the doubt.

We consider it possible that G14 may include the ash in TG3026 and the sycamores in TG3027, and have indicated this accordingly in the survey data schedule.

We understand that trees within the Ornamental Garden stand within the Fulbourn Conservation Area, thereby conferring similar statutory protection to the TPO.

Further statutory control over tree removal may be conferred by the Forestry Act 1967.

Species

Tree species as listed in the schedule by common name. Species present are:

<i>Common name</i>	<i>Botanical name</i>	<i>Provenance</i>	<i>Notes</i>
Apple	<i>Malus domestica</i>	Native	
Ash	<i>Fraxinus excelsior</i>	Native	
Austrian pine	<i>Pinus nigra</i>	Exotic	
Beech	<i>Fagus sylvatica</i>	Native	
Bird cherry	<i>Prunus padus</i>	Native	
Blackthorn	<i>Prunus spinosa</i>	Native	
Butterfly bush	<i>Buddleja davidii</i>	Exotic	
Cherry laurel	<i>Prunus laurocerasus</i>	Exotic	
Cider gum	<i>Eucalyptus gunnii</i>	Exotic	
Common lime	<i>Tilia x europaea</i>	Native	
Crab apple	<i>Malus sylvestris</i>	Native	
Crack willow	<i>Salix fragilis</i>	Native	
Dog rose	<i>Rosa canina</i>	Native	
Dogwood	<i>Cornus officinalis</i>	Native	
Elder	<i>Sambucus nigra</i>	Native	

Field maple	Acer campestre	Native	
Flowering cherry	Prunus sp.	Exotic	Generic term for Japanese cherries
Gean	Prunus avium	Native	
Goat willow	Salix caprea	Native	
Hawthorn	Crataegus monogyna	Native	
Hazel	Corylus avellana	Native	
Himalayan birch	Betula utilis	Exotic	
Holly	Ilex aquifolium	Native	
Hornbeam	Carpinus betulus	Native	
Horse chestnut	Aesculus hippocastanum	Naturalised	
Laburnum	Laburnum anagyroides	Exotic	
Large leaved lime	Tilia platyphyllos	Native	
Leyland cypress	x Cupressocyparis leylandii	Exotic	
Norway maple	Acer platanoides	Exotic	
Norway spruce	Picea abies	Exotic	
Pear	Pyrus communis	Native	
Plum	Prunus domestica	Native	
Purple plum	Prunus cerasifera 'Pissardii'	Exotic	
Red horse chestnut	Aesculus x carnea	Exotic	
Rowan	Sorbus aucuparia	Native	
Scots pine	Pinus sylvestris	Native	
Silver birch	Betula pendula	Native	
Spindle tree	Euonymus europaeus	Native	
Sycamore	Acer pseudoplatanus	Naturalised	
Walnut	Juglans regia	Exotic	
Weeping willow	Salix x sepulcralis 'Chrysocoma'	Exotic	
Western red cedar	Thuja plicata	Exotic	
White poplar	Populus alba	Exotic	
Yew	Taxus baccata	Native	Present as 'Fastigiata'

Tree Count

For trees assessed as groups (ident. prefix TG), number of trees present, according to:

2-10 trees	Accurate count
11-50 trees	Close estimate
51-100 trees	Estimate

Note

Assemblages of trees

Area m²

For trees assessed as woodland (ident. prefix WG), existing area in square metres within survey envelope, derived from CAD interrogation of the completed tree survey plan

Ht. (m)

Tree height in metres

Either:

Crown Spread

For individual trees, measured radial crown spread in metres, listed for each of the four cardinal points

Or:

MRCS

For trees assessed as groups or woodland, an estimated mean radial crown spread in metres for trees at the 80 percentile size

Note

For trees assessed as woodland, sample measurements for canopy overhang beyond woodland boundary (i.e. hedgerow, fence, ditch etc.) are given on the tree survey plan

Or:

Mean Width

Mean width in metres of hedge or hedgerow

Length

Approximate length in metres of hedge or hedgerow

Ht. 1st Br.

For individual trees and trees assessed as groups or woodland, height in metres above ground of attachment point of first significant branch (cardinal point may be given indicating growing direction)

Ht. Can.

For individual trees and trees assessed as groups or woodland, mean height in metres of lower extent of tree canopy above ground

Stem Count

For individual trees, number of stems present below 1.5m AGL. Stem count affects diameter entry as follows:

Where the stem count is 1 the diameter should be entered into the 1 column under Stem Dia.

Where the stem count is up to 5 each stem dia. should be listed

Where the stem count exceeds 5, the mean stem diameter should be entered in the 1 column

Either:

Stem Dia. (mm)

Stem diameter(s) at 1.5m above ground level (see measurement system in BS5837:2012 Annex C), given in millimetres

Where entered 1:

Single measured stem diameter

Where entered 2-5:

Multiple measured stem diameters, listed per stem

Where entered >5:

For trees with more than five stems, diameter is listed as an estimated mean

Where the diameter entry for trees with 1 or 2-5 stems appears in italics, this indicates that it was estimated by the surveyor (for example, due to the presence of ivy on the stem)

It is our practice to round up when estimating stem diameters

Or:

Specimen Stem Dia.

For trees assessed as groups or woodland, stem diameter in millimetres at 1.5m above ground level for 80 percentile member of TG or WG. Trees with larger diameters are identified on the TSP

Or:

Mean Stem Dia.

Mean stem diameter in millimetres above the basal flare of hedge or hedgerow component plants

Either:

RPA Rad.

Radius in metres of the notionally circular Root Protection Area

Or:

Specimen RPA Rad.

For trees assessed as groups or woodland, radius in metres of the notionally circular Root Protection Area based on specimen diameter for TG or WG 80 percentile tree

Either:

RPA Area

Conversion of RPA radius to an area, given in m², capped to a maximum of 707m² (in line with BS5837:2012)

Or:

Specimen RPA Area

For trees assessed as groups or woodland, conversion of specimen RPA radius to an area, given in m², capped to a maximum of 707m²

Note

RPA for hedges or hedgerows is to be taken as 3m from the centreline, half the height or 2m beyond existing width, whichever is the greater

Life Stage

Life stage assessment according into:

Y	Young
SM	Semi-mature
EM	Early mature
M	Mature
OM	Over-mature

Phys. Condition

An assessment of the **physiological** condition (i.e. health/vitality) status of the tree summarised according to:

GOOD	Generally in healthy condition
FAIR	Condition satisfactory though below mean species performance
POOR	Tree in decline/retrenching
DEAD	Self explanatory

Structural condition & Notes

Notes on the apparent structural integrity of the tree based on visual tree assessment, including notes on form, taper, forking habit, storm damage, decay fungi, pests, etc. plus other pertinent observations

Management recommendations

Preliminary recommendations for intervention (e.g. tree surgery, felling, etc) in relation to existing context

Trees assessed as being in apparently immediately hazardous condition will be notified to the client separately as soon as practical. Where the recommendation is for further investigation, including removal of ivy and reinspection, the given retention span and quality/value grade (see below) should be treated as provisional

Notes

This is **not** intended to comprise a specification for tree work: further advice should be sought prior to implementation

Change in land use (target value) requires further assessment

Ret. Span

Estimated remaining retention span based on species, condition & context divided into the following bands (relates to quality and value grade achievable as stated):

Years Best QV grade

<10	U
10+	C
20+	B
>40	A

QV Grade

Quality & Value grade classification according to BS5837:2012 (see attached extract from BS5837:2012 'Table 1 - Cascade Chart for Tree Quality Assessment') –

<i>Grade</i>	<i>Summary meaning</i>	<i>Ident. colour spot on TSP</i>
U	Trees that are unretainable in viable condition	Dark red
A	High quality & value and consequent high retention priority	Light green
B	Moderate quality and value (moderate priority for retention)	Mid-blue
C	Low quality and value (generally considered to be sacrificial)	Grey

Note

Trees present which we consider to be **exceptional** specimens are identified by the suffix * after the A grade, e.g. A1*

Proposal

This column identifies:

1. Pre-planning (Arboricultural Stages 1, Tree Survey, & 2, Design):
JFL's initial view of a defensible tree retention / removal balance
2. Planning submission (Arboricultural Stage 3):
The actual tree retention / removal balance as proposed

The following codes are used:

RET	1. Trees preferably retained 2. Trees that would be retained
PRET	<i>For woodlands only</i> – signifies partial retention (see below)
REM	1. Trees defensibly removed to facilitate development 2. Trees that would be removed
U	Trees identified to be unsuitable for retention

Area retained m²

For woodlands only

Area, in square metres, of woodland (WG) proposed for retention. Outcomes are as follows:

Survey grade U	Area for retention defaults to 0 (can be amended by manual override)
Proposal code RET	Area for retention defaults to existing area
Proposal code PRET	Area for retention requires manual input following interrogation of relevant plans
Proposal code REM	Area for retention defaults to 0

Area retained %

For woodlands only

Percentage of pre-existing WG area that would be retained, based on an auto-sum derived from inputs into the preceding column

TEVERSHAM ROAD, FULBOURN : TREE SURVEY DATA TABLE

Data for individual trees

FIAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Area (m ²)	Life Stage	Phys. Condition	Structural condition & Notes	Management recommendations	Ret. Span	QV Grade	Proposal
				N	S	W	E				1 / mean	2	3	4	5								
3001A7		Ash	21.6	15.7	10	11	7.4 N	2.2	1	1100						547	OM	F	Water filled ditches to immediate south and west. Very dense ivy impedes inspection and diameter measurement. Stem bifurcates from 2.5 metres before diverging further into large scaffold members forming a broadly spreading crown covering a large area with a pronounced bias to both west and north and sharing companion shelter to east. Dense ivy present through crown structure impedes assessment. Splayed form appears vulnerable to fracture of long laterals under their own weight plus wind-loading - intervention pruning advised to reduce likelihood of failure in particular at west through to north where target occupancy is greatest and also to third party land at south. Moderate dead wood scattered through crown. A large and prominent specimen.	Reduce whole crown by 2.5 metres radially and reduce the long limb at north-west (over ditch) by 3.5 metres. Remove dead wood >15mm in diameter. Gridle and remove ivy from ground level to 2 metres.	20+	B1	RET
3002		Sycamore	15.3	1	4.7	4.7	5.8 W	4	2	500	350					169	M	G	Dense ivy impedes inspection of stem and principal branch structure. Shares companion shelter and aerodynamic form with adjacent specimen. In satisfactory overall condition. Ditch to west.	No action required at time of survey.	>40	B1	RET
3003		Ash	15.2	1.5	5	5.8	3.24 S	5	4	280	270	180	170			96	EM	F	Slender, drawn-up specimen. Shares companion shelter and aerodynamic form with adjacent specimens. Ditch to west.	Remove dead wood >15mm in diameter.	>40	B1	RET
3004		Ash	15	2	1	5	4.52 W	2	3	280	270	200				87	EM	F	Multi-stemmed from ground level. Shares companion shelter and aerodynamic form with adjacent specimens. Slender, drawn-up stems with early bark inclusions at unions. Ditch to west.	No action required at time of survey.	20+	B1	RET
3005		Sycamore	15	5	1	4.8	5.62 E	1.5	6	240						157	EM	F	Multi-stemmed from ground level. Shares companion shelter and aerodynamic form with adjacent specimens. Slender, drawn-up stems with early bark inclusions at unions. Ditch to west.	No action required at time of survey.	20+	B1	RET
3006		Sycamore	11	4.8	4.2	1.6	4.22.6 N	3	2	227	155					34	SM	G	Twin stems from ground level. Tight unions and compression between stems likely to affect long-term retention.	No action required at time of survey.	20+	C1	REM
3007		Ash	10	0.5	5	0	3.62.5 S	3	1	132						8	SM	F	Acute basal sweep to east from ground level. Suppressed, with asymmetrical form.	No action required at time of survey.	20+	C1	REM
3008		Ash	11	3	4	2	0.9 S	2	6	165						74	SM	F	Several slender upright stems from one compact crown. Low arboricultural or landscape merit.	No action required at time of survey.	20+	C1	REM
3009		Ash	11	4	3.5	0	4.2.8 N	3	3	170	170					39	SM	F	Several slender upright stems from one compact crown. Low arboricultural or landscape merit.	No action required at time of survey.	20+	C1	REM
3010		Ash	10.2	1	3	1	2.2.3 SE	2.6	1	122						7	SM	F	Slender, drawn-up, suppressed and asymmetrical. Low arboricultural and landscape merit.	No action required at time of survey.	20+	C1	REM
3011		Ash	10.2	4	1.5	1	4.51.6 E	1	1	226						23	SM	F	Stem and principal branch structure and unions in satisfactory condition. Shares companion shelter and aerodynamic form with resulting asymmetrical form.	No action required at time of survey.	20+	C1	REM
3012		Ash	5.5	2.8	1	2	3.2 W	2	4	75	75	35				8	Y	G	A scrubby and unremarkable multi-stemmed specimen. Low arboricultural and landscape merit.	No action required at time of survey.	20+	C1	REM
3013		Ash	10.5	3.4	4	3.7	0.2 W	2	1	170						13	SM	G	Slender, suppressed and with asymmetrical form.	No action required at time of survey.	20+	C1	REM
3014		Ash	10	2.9	0	3	2.6.3 N	3	1	165						12	SM	G	Slender, suppressed and with asymmetrical form.	No action required at time of survey.	20+	C1	REM
3015		Ash	11.5	2	5.5	4.8	2.8.3 S	2	2	255	145					39	EM	G	Stem and principal branch structure and unions in satisfactory condition. Secondary stem present from ground level at east. Some internal dead wood present. In satisfactory overall condition.	No action required at time of survey.	>40	B1	REM
3016		Hawthorn	5	3.6	0	2	1.51 N	1	1	120						7	SM	F	Heavily suppressed with resulting asymmetrical form. Low arboricultural and landscape merit.	No action required at time of survey.	20+	C1	REM
3017		Ash	11	6	0	6	24.5 N	2.5	1	325						48	EM	G	Stem is slightly swept to north from ground level after companion shelter. Principal branch structure and unions in satisfactory condition. Crown structure partially obscured by ivy. Crown bias to north and west.	No action required at time of survey.	20+	B1	REM
3018		Sycamore	12	6	6	6	61 N	0.5	3	430	430	400				240	M	G	Multi-stemmed from ground level. Very dense ivy impedes inspection and diameter measurement. Some included unions seen within structure but these appear stable currently.	No action required at time of survey.	20+	B1	REM
3019		Sycamore	11	4	3.8	0	4.8.5 N	4	3	240	240	160				64	SM	F	Slender, suppressed stems with very dense ivy impeding inspection. Asymmetrical crown form. Low arboricultural or landscape merit.	No action required at time of survey.	20+	C1	REM
3020		Ash	10.5	5.5	0	4	1.8.3.7 N	4	1	200						18	SM	F	Stem incline and crown bias to north after companion shelter. Low arboricultural or landscape merit.	No action required at time of survey.	20+	C1	REM
3021		Sycamore	14	7.5	5	6	81 N	1	4	510	510	360	300			335	M	G	Multi-stemmed from close to ground level with tight unions but in apparent stable condition currently. Very dense ivy present through crown.	No action required at time of survey.	>40	B1	REM
3022		Sycamore	14	4	0	6	5.8.2 W	2.5	2	340	220					74	EM	G	Very dense ivy impedes inspection and diameter measurement. Twin stems from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM
3023		Sycamore	14	4	0	6	5.4 NE	4	2	370	320					109	EM	G	Very dense ivy impedes inspection and diameter measurement. Twin stems from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM

FLAC Ref. No.	TPO Ref	Species	Crown Spread (m)				Ht. (m)	Stem Count	Stem Dia. (mm)				Phys. Condition	Structural condition & Notes	Management recommendations	Ret. Span	QV Grade	Proposal
			N	S	W	E			1 / mean	2	3	4						
3024		Sycamore	14	2	6.8	63.7 E	4	2	380	380		G	Very dense ivy impedes inspection and diameter measurement. Twin stems from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM	
3025		Sycamore	14	1	6.8	41 E	1	2	320	150		G	Very dense ivy impedes inspection and diameter measurement. Twin stems from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM	
3026		Sycamore	15	1	6.8	64 E	2	4	360	330	190	G	Very dense ivy impedes inspection and diameter measurement. Multi-stemmed from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM	
3027		Sycamore	15	2	5.5	8.6	7.22 W	0.5	2	700	350	G	Very dense ivy impedes inspection and diameter measurement. Twin stems from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM	
3028		Sycamore	15	0	6.5	8.2	72 W	2	3	360	350	G	Very dense ivy impedes inspection and diameter measurement. Multi-stemmed from close to ground level. Very little of structure visible. Sharing close companion shelter with adjacent specimens resulting in asymmetrical form although a component of a wider collective crown.	No action required at time of survey.	20+	B1	REM	
3029 A7		Sycamore	16	7	5	6	32.6 N	2	1	700		G	Fence and dense ivy both impede inspection and diameter measurement. Structure and vitality both appear satisfactory.	No action required at time of survey.	20+	B1	RET	
3030 A7		Sycamore	16	2	4	3	4.87 E	7	1	500		G	Fence and dense ivy both impede inspection and diameter measurement. Structure and vitality both appear satisfactory.	No action required at time of survey.	20+	B1	RET	
3031		Weeping willow	3.5	15	0	0	10	0	1	700		P	Off site tree that has collapsed across the ditch. Large brackets of <i>Polyporus squamosus</i> present in region of decayed section. Collapsed section lies substantially within site boundary. Limited future potential although currently still alive and bearing foliage.	No action required at time of survey.	20+	C1	REM	
3032		Plum	5	2.6	3.6	3	43 W	2	1	290		P	<i>Gonoloma</i> sp. fruiting brackets at north-east and south-west and associated decay of stem. Large dead wood limbs present. Approximately 45% dead.	No action required at time of survey.	<10	U	U	
3033 A7		Austrian pine	21.4	7	7.6	5	68 SW	8	1	800		P	Very dense ivy impedes inspection and diameter measurement. Distal decline observed throughout twig structure of upper crown. Large dead limbs present at north of crown. Vitality impaired.	No action required at time of survey.	10+	C1	RET	
3034		Large leaved lime	14	3.4	6.5	4.6	5.13 S	0.5	1	237		F	Slender, upright stem. Principal branch structure and unions in satisfactory condition. Good overall form despite light restriction and companion shelter.	No action required at time of survey.	>40	B1	RET	
3035 A7		Austrian pine	14	0	7.3	5.3	18 SW	6	1	580		P	Very dense ivy impedes inspection. Most of upper crown previously lost after fracture of stem. Large limb to south-west remains. Low residual merit or potential.	No action required at time of survey.	10+	C1	RET	
3036		Western red cedar	14	2.8	3.5	3.2	3.603 E	0	1	375		G	Upright lower stem trifurcates from 3 metres with poor included and compressed unions that appear likely to limit long-term retention.	No action required at time of survey.	20+	C1	REM	
3037 A7		Yew	10	5.5	8	6.5	5.316 S	1	2	410	273	G	General bias of structural form and crown to south after companion shelter. In satisfactory condition.	No action required at time of survey.	>40	B1	RET	
3038 A7		Yew	12.3	4.5	5	5	5.74 NE	3	1	620		G	Stem and principal branch structure and unions in satisfactory condition. Attractive, symmetrical form. High quality landscape tree.	No action required at time of survey.	>40	A1	RET	
3039 A7		Western red cedar	21	2	2.8	2	2.56 S	3	1	540		G	Upright stem. Principal branch structure and unions in satisfactory condition. No apparent significant defects.	No action required at time of survey.	20+	B1	RET	
3040		Western red cedar	18	3.2	3.2	3.2	3.203 W	0.5	1	750		G	Upright, columnar form. Principal branch structure and unions in satisfactory condition. Overall in good condition.	No action required at time of survey.	>40	B1	RET	
3041		Yew	13.5	7.5	5.4	7.8	6.53 S	1	1	740		G	Stem and principal branch structure and unions in satisfactory condition. Attractive, symmetrical form. Good future potential. High quality landscape tree.	No action required at time of survey.	>40	A1	RET	
3042		Yew	13	10.4	2.5	7.4	7.23 S	1.7	1	900		G	Slight stem incline to north from ground level. Principal branch structure and unions in satisfactory condition. Good overall form and condition. High quality landscape tree.	No action required at time of survey.	>40	A1	RET	
3043		Western red cedar	18.8	3.5	1	3	32.5 N	1	1	605		G	Upright stem. Principal branch structure and unions in satisfactory condition. No apparent significant defects.	No action required at time of survey.	20+	B1	RET	
3044		Yew	11.4	7.5	4	7.4	6.425 W	1	1	910		G	Slight stem incline to north from ground level. Principal branch structure and unions in satisfactory condition. Good overall form and condition. High quality landscape tree.	No action required at time of survey.	>40	A1	RET	
3045		Austrian pine	20.4	4.7	1	3	611 N	10	1	670		F	Ivy impedes inspection of stem. Slight incline to north-east after companion shelter. Asymmetrical crown. Satisfactory overall condition.	No action required at time of survey.	20+	B1	RET	
3046		Western red cedar	18.4	3.2	4.2	5	4.77 S	5	1	770		F	Stout, upright stem. Some dead wood at lower stem after light exclusion. Typical form and structure for the species. Overall in satisfactory condition.	No action required at time of survey.	20+	B1	RET	
3047		Holly	15	4	5	2	54 E	2.5	1	365		F	Slight stem incline to east from ground level after light competition. Typical form and structure for the species. In satisfactory overall condition.	No action required at time of survey.	20+	B1	RET	
3048		Western red cedar	18.2	4.3	4.5	4.2	4.31 S	0	2	820	220	G	Secondary stem from 1 metre south. Typical form and structure. No apparent significant defects.	No action required at time of survey.	20+	B1	REM	
3049		Yew	4.5	4	3	4	31 S	0	1	180		G	Compact specimen of shrub-like form.	No action required at time of survey.	>40	B1	REM	
3050		Large leaved lime	4.5	2	2	2	21 S	1	7	50		G	Multi-stemmed from ground level, probably growing from an old stump. Tree of relatively low significance.	No action required at time of survey.	>40	C1	REM	
3051		Large leaved lime	9	5.3	1	3.8	4.545 N	3.5	1	560		P	Recent collapse of stem leaves a 6 metre stump with a single limb from 3.5 metres at west. Possible nest site in decayed zone near lower edge of fracture.	No action required at time of survey.	20+	C1	RET	

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)				Ht. 1 st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m ²)	Life Stage (Y-SM-E-M-M-O-M)	Phys. Condition (G-F-F-D)	Structural condition & Notes	Management recommendations	Ret. Span (<10, 10+ 20+, >40)	QV Grade (U-A-B-C)	Proposal
				N	S	W	E				1 / mean	2	3	4	5									
3052		Bird cherry	13	6.6	1	7	22.3 N	0.5	1	370				4.44	62	M	G	Stem becomes swept to north-east after light suppression. Heavily asymmetrical form but to well developed to become anything but a sub-optimal specimen.	No action required at time of survey.	20+	C1	REM		
3053 A7		Beech	31	10.7	7.8	7.8	8.84 S	2	1	1020			12.24	470	M	G	Dense ivy impedes inspection of lower stem and base. Stout lower stem section has good taper up into crown. Principal branch structure and unions in satisfactory condition. Occasional moderate sized dead wood but overall in good condition. A very high quality landscape tree.	Remove dead wood >15mm in diameter that may affect highway land to south.	>40	A1	RET			
3054 A7		Horse chestnut	25	7.3	4.5	5.3	7.34 S	2	1	688			8.26	214	M	G	Upright stem. Principal branch structure and unions in satisfactory condition. No apparent significant defects. High quality landscape tree.	No action required at time of survey.	>40	A1	RET			
3055		Laburnum	9.2	2	3.7	4.4	4.52 S	4	2	272	223		4.23	56	M	F	Stem and principal branch structure and unions in satisfactory condition. Typical form and structure for the species. In satisfactory condition but with limited future potential due to current life stage.	No action required at time of survey.	10+	C1	REM			
3056		Rowan	10	4.4	2.5	2.8	4.82 S	2	1	310			3.72	43	EM	G	Stem and principal branch structure and unions in satisfactory condition. Dead wood at lower crown but overall in satisfactory condition.	No action required at time of survey.	20+	B1	REM			
3057 A7		Sycamore	23.5	10	11	9	7.5 S	4	1	1280			15.00	707	M	G	Very dense ivy impedes inspection and diameter measurement. Very large for the species in prominent position at south boundary of the site. High quality landscape tree.	Girdle and remove ivy from ground level to 2 metres.	>40	A1	RET			
3058 A7		Sycamore	21.5	6.9	9.3	7	7.54 SW	3	1	810			9.72	297	M	G	Dense ivy impedes inspection of stem and principal branch unions. Typical form for the species with attractive lateral branch structure. High quality landscape tree.	Girdle and remove ivy from ground level to 2 metres.	>40	A1	RET			
3059 A7		Sycamore	27	11	9.5	7.5	9.3 S	3	1	1180			14.16	630	M	F	Very dense ivy impedes inspection and diameter measurement. Large stem bifurcates from 5 metres. Distal decline observed of a few individual limbs at upper south crown with some potential to affect highway to south. No causal agent seen but dense suckering and ivy impede basal inspection so work to clear this is recommended.	Girdle and remove ivy from ground level to 2 metres. Remove dead wood >15mm in diameter.	20+	B1	RET			
3060 A7		Sycamore	23	9	8	10	10.837 S	4	1	1100			13.20	547	M	F	Specimen has re-grown after past topping at 7 metres. Ivy previously severed enabling greater inspection of structure than similar specimens on this boundary. Overall in good condition.	No action required at time of survey.	>40	A1	RET			
3061		Cider gum	11	5	5	5	5.236 S	2	1	400			4.80	72	EM	G	Off site tree. No access. Remote inspection only. Past crown reduction pruning work evident. No apparent significant defects.	No action required at time of survey.	>40	B1	RET			
3062 A6		Ash	20	10.8	1.5	6	10.6 N	0	1	720			8.64	234	M	F	Very dense ivy impedes inspection. Stem and principal branch structure and unions completely obscured and diameter estimated under ivy. Asymmetrical crown form after suppression by dominant willow to south. Low limbs to north and north-east appear over-extended and vulnerable to fracture (sub-lateral failure evident currently at north-east). Both the long limbs hang low to ground level at their tips. Specimen appears to have limited future potential and the grade is to be considered provisional and subject to amendment after ivy withers enabling clearer assessment of structural condition. Stream to west.	Girdle and remove ivy from ground level to 2 metres.	20+	B1	RET			
3063 A6		Crack willow	23.5	8	5	2	11.24 S	3	1	1260			15.00	707	M	F	Very stout lower stem with initial incline to north from ground level. Very dense ivy impedes inspection of stem and principal branch structure and diameter measurement has been estimated beneath ivy. Some lower crown dead wood after light exclusion. Past failure of scaffold from approximately 8 metres north evident, probably during winter high winds. Grade is to be considered provisional and subject to amendment after ivy withers enabling clearer assessment of structural condition. Stream to west.	Girdle and remove ivy from ground level to 2 metres.	20+	B1	RET			
3064		Sycamore	10	4	2	6	3.515 E	1.2	1	275			3.30	34	SM	F	A suppressed specimen with asymmetrical form. Low arboricultural or landscape merit. Stream to west.	No action required at time of survey.	20+	C1	RET			
3065 A6		Sycamore	14	5	5	6.5	6.522 E	2	1	520			6.24	122	EM	G	Very dense ivy impedes inspection of stem and principal branch structure. In satisfactory overall condition. Stream to west.	No action required at time of survey.	>40	B1	RET			
3066		Sycamore	11.3	4.2	3.5	2	3.826 N	3	1	320			3.84	46	SM	G	Slender, upright stem. Dense vegetation impedes access and inspection. In satisfactory overall condition.	No action required at time of survey.	>40	B1	RET			
3067 A6		Hawthorn	4.7	3	3	3	1.503 N	1.5	1	350			4.20	55	EM	P	Very heavily ivy clad. Heavily suppressed. Low vitality evident with sparse foliage.	No action required at time of survey.	10+	C1	RET			
3068		Ash	6.5	2.7	2.2	2.7	2.815 W	1.8	1	130			1.56	8	Y	G	Small specimen with some crown asymmetry likely to be due to past companion shelter of coppiced willows to south.	No action required at time of survey.	>40	C1	RET			
3069		Apple	3	2.2	2.4	2.4	2.412 N	1.5	1	270			3.24	33	SM	G	Off site tree. No access. Compact crown overhangs site boundary. Tree of relatively low significance.	No action required at time of survey.	>40	C1	RET			
3070 A6		Sycamore	16.5	7.8	8	6.4	7.715 N	2	1	770			9.24	268	M	G	Stem and principal branch structure and unions in satisfactory condition. Ivy has been severed previously. Attractive, symmetrical crown. Diameter measured at 1 metre due to stem morphology.	No action required at time of survey.	20+	C1	RET			
3071		Sycamore	15.3	6	6	4.4	5.2 W	2	1	370			4.44	62	EM	G	Upright stem bifurcates at 4.5 metres with early bark inclusion. Remaining structure good. In satisfactory condition for the medium term at the least.	No action required at time of survey.	>40	B1	RET			
3072 A6		Sycamore	14.3	6	8.4	5.8	7.45 N	3	1	630			7.56	179	M	G	Stem and principal branch structure and unions in satisfactory condition. General bias of structure and crown form to south and east. Variegated foliage. In satisfactory overall condition.	No action required at time of survey.	>40	B1	RET			
3073 A6		Horse chestnut	15.5	7.4	7.4	7.4	7.44 S	3	1	650			7.80	191	EM	G	Off site tree. No access. Assumed to be a private specimen. Symmetrical crown form. Remote inspection only.	No action required at time of survey.	20+	B1	RET			
3074		Sycamore	15.2	2	5	4	2.85 S	5	1	420			5.04	80	EM	G	Previously crown reduced. Remote inspection only.	No action required at time of survey.	20+	B1	RET			
3075 A6		Sycamore	15.8	8.2	4.5	6	5.428 N	6	1	960			11.52	417	M	G	Off site tree. No access. Assumed to be a private specimen. Very stout lower stem. Crown bias to north. Previously crown reduced. Remote inspection only.	No action required at time of survey.	20+	B1	RET			
3076		Elder	6	3.7	2.8	2.2	1.81 W	1	2	250	140		3.44	37	M	G	Twin stems from ground level. Principal branch structure and unions in satisfactory condition. Ivy previously severed. Tree of relatively low significance.	No action required at time of survey.	20+	C1	RET			

FLAC Ref. No.	TPO Ref	Species	Ht. (m)	Crown Spread (m)					Ht. 1 st Br. (m)	Ht. Can. (m)	Stem Count	Stem Dia. (mm)					RPA Rad. (m)	RPA Area (m ²)	Life Stage	Phys. Condition	Structural condition & Notes	Management recommendations	Ret. Span	QV Grade	Proposal
				N	S	W	E	1 / mean				2	3	4	5	Y-SM-EW-M-O-M									
3077		Ash	13	2	2	6	3.5	E	4	1	400					4.80	72	SM	F	Very heavily ivy clad, so much so that little more than branch endings can be seen. Specimen has relatively poor form resulting from close companion shelter and suppression.	No action required at time of survey.	20+	C1	RET	
3078 A6		Sycamore	14.6	6	6	5	6.3	N	4	1	550					6.60	137	M	G	Very dense ivy impedes inspection and diameter measurement. Fairly symmetrical crown form. In apparent satisfactory condition.	No action required at time of survey.	20+	B1	RET	
3079 A6		Hawthorn	7.3	4	4	4	4.2	N	0.5	1	400					4.80	72	M	G	A compact, domed crown form. Very dense ivy impedes inspection of structure and diameter measurement.	No action required at time of survey.	20+	B1	RET	
3080		Ash	10.5	5	5.5	5	5.5	1.5	E	2	375					4.50	64	SM	G	Diameter measured at 1 metre due to stem morphology. Compact, low domed crown form. Branch structure satisfactory. No apparent significant defects.	No action required at time of survey.	>40	B1	RET	
3081		Weeping willow	11.3	7.5	7	8.8	5.2	W	0	1	750					9.00	254	M	G	Off site tree. No access. Remote inspection only. Typical form and structure. Crown periphery hangs low to ground level at west.	No action required at time of survey.	>40	B1	RET	
3082		Gean	6	3.7	3.8	3.7	3.6	1.5	W	1	170	160	150	140		3.73	44	SM	F	Multi-stemmed from 0.6 metres. Symmetrical crown. In satisfactory condition for medium term retention span. Tree of relatively low significance.	No action required at time of survey.	20+	B1	RET	
3083		Holly	3.3	1	1	1	1.0	W	0.5	1	120					1.44	7	Y	G	Off site tree. No access. Remote inspection only. Compact, columnar form. Tree of relatively low significance.	No action required at time of survey.	>40	C1	RET	
3084		Walnut	5	2.5	2.5	2.2	2.5	1.5	W	1.5	140					1.68	9	Y	G	Off site tree. No access. Remote inspection only. No apparent significant defects.	No action required at time of survey.	>40	C1	RET	
3085		Norway spruce	4	1.5	1.5	1.5	1.5	1	W	1	100					1.20	5	Y	G	Off site tree. No access. Remote inspection only. No apparent significant defects.	No action required at time of survey.	>40	C1	RET	
3086		Norway spruce	7.7	2.5	2.5	2.5	2.5	1	W	1	200					2.40	18	SM	G	Off site tree. No access. Remote inspection only. No apparent significant defects.	No action required at time of survey.	>40	B1	RET	
3087		Walnut	12	3	6	6	6.2	S	1	3	340	300	200			5.95	111	EM	G	Off site tree on railway land. Remote inspection only. A multi-stemmed specimen that has had the principal trackside stem removed. Remaining structure appears in satisfactory condition currently.	No action required at time of survey.	>40	B1	RET	
3088		Ash	15	2.5	7.5	8	7.4	S	1	2	480	380				7.35	170	EM	G	Off site tree on railway land. Remote inspection only. A twin-stemmed specimen that has had heavy trackside crown pruning. Remaining structure appears in satisfactory condition currently.	No action required at time of survey.	>40	B1	RET	
3089		Sycamore	5.5	2	4	4	4.0	S	1	1	320					3.84	46	SM	G	Off site tree. No access. Remote inspection only. Principal stem has been cut down to around 1 metre. The lateral limbs to the south, west and east have been retained and these all encroach into the site. Low arboricultural or landscape merit.	No action required at time of survey.	20+	C1	RET	
3090 A7		Common lime	21	4.5	7	5	7.3	S	2	1	1070					12.84	518	M	G	Scout, upright stem adjacent to gate pillar within curtilage of domestic garden. Previously subjected to heavy topping work at approximately 9 metres, now fully re-grown with typical upright scaffolds. Shares companion shelter with the adjacent specimen. Resident reports extant planning consent to re-pollard. High quality tree in prominent position.	No action required at time of survey.	>40	A1	RET	
3091 A7		Common lime	22.5	7.2	7.1	7	7.6	N	4	1	970					11.64	425	M	G	Scout, upright stem adjacent to gate pillar within curtilage of domestic garden. Previously subjected to heavy topping work at approximately 9 metres, now fully re-grown with typical upright scaffolds. Shares companion shelter with the adjacent specimen. Resident reports extant planning consent to re-pollard. High quality tree in prominent position.	No action required at time of survey.	>40	A1	RET	
3092 A7		Western red cedar	20	5	4	5	4.2	N	0	1	750					9.00	254	M	G	Within domestic garden. Typical form and structure. Unable to access stem to measure diameter due to fences and materials stacked around base. No apparent significant defects.	No action required at time of survey.	>40	B1	RET	

Data for trees assessed as groups (TG)

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	MRC5 (m)	Ht. 1 st Br. (m)	Ht. Can. (m)	Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m ²)	Life Stage (Y-SM, EM-M, OM)	Phys. Condition (G-F-P-D)	Structural condition & Notes	Management recommendations	Ret. Span (<10, 10+ 20+, >40)	QV Grade (U-A-B-C)	Proposal
TG3001		Field maple	3	10	5.5	2	2.8	300	3.60	41	EM	G	Off site tree group. Remote inspection only. Linear tree group. Stems and principal structures in satisfactory condition.	No action required at time of survey.	>40	B1	RET
TG3002		Ash x2, sycamore x2	4	11	4.2	W	2.5	300	3.60	41	SM	G	Off site tree group. Remote inspection only. Linear tree group. Sycamores at south slightly larger than mean dimensions. Specimens previously topped, ashes beneath overhead cables.	No action required at time of survey.	20+	C2	RET
TG3003	A7	Ash x1, hornbeam x1, Austrian pine x4	6	23	8.4	N	2	680	8.16	209	M	G	Off site tree group. Remote inspection only. Specimens located to south of broad ditch. Hornbeam and ash both have canopies that hang low over the site boundary.	No action required at time of survey.	>40	B2	RET
TG3004		Hawthorn x50, ash x20	70	3.8	2	0.5	0.5	35	0.42	1	Y	G	A dense area of very homogenous saplings below the threshold for individual trees but included due to their mass grouping.	No action required at time of survey.	>40	C2	REM
TG3005		Hawthorn x4, sycamore x3, ash x2	9	7	4	2	1	110	1.32	5	Y	F	Dispersed group of scrubby specimens beneath north canopies of the principal trees.	No action required at time of survey.	20+	C2	REM
TG3006		Pear x2	2	5	3.1	N	2	200	2.40	18	SM	F	A pair of and unremarkable fruit trees.	No action required at time of survey.	>40	C2	REM
TG3007	A7	Austrian pine x11, sycamore x3	14	21.5	8.3	N	3	800	9.60	289	M	G	A linear tree group, the principal trees have dense ivy through their crown structure. Overall condition is good. Some moderate sized dead wood present. Varying degrees of understory trees present along the group, generally of low quality due to suppression but in satisfactory condition. The principal trees form a high quality landscape feature and define the northern edge of the densely treed area.	No action required at time of survey.	>40	A2	RET
TG3008		Hawthorn x2, hazel x1, sycamore x5, ash x2	6	21.5	6.5	W	6	700	8.40	222	M	G	Off site tree group. No access. Remote inspection only. Linear arrangement. Re-grown pollards, third from south heavily pruned. High quality tree group.	No action required at time of survey.	>40	A2	RET
TG3009	A7	Austrian pine	5	22	8.8	S	6	750	9.00	254	M	F	Linear tree group. Evenly spaced specimens, quite homogenous in appearance except for east tree, which has twin stems and a more open crown form. Fourth tree from west has slightly impaired vitality seen as sparser foliage than companions.	No action required at time of survey.	20+	B2	RET
TG3010		Holly	4	6	2.6	1	0	180	2.16	15	SM	F	Dispersed tree group of scrubby and unremarkable understory specimens. Low arboricultural and landscape merit.	No action required at time of survey.	20+	C2	RET
TG3011		Western red cedar x1, yew x3	4	5	3.5	1	0	350	4.20	55	EM	F	Linear tree group growing from mid-point of paved, sloped bank to pond. Limited future potential or appeal.	No action required at time of survey.	20+	C2	REM
TG3012		Holly x3, cherry laurel x2	5	8	4	1	0	350	4.20	55	SM	F	Dispersed tree group of scrubby and unremarkable specimens. Hollies at east. Low arboricultural and landscape merit.	No action required at time of survey.	20+	C2	RET
TG3013		Yew	3	12	8.3	N	1	650	7.80	191	M	G	Specimens share companion shelter and aerodynamic form but are not of notably high quality or merit despite being in satisfactory condition. Collectively sterilizing a large area due to dense shading.	No action required at time of survey.	>40	B2	RET
TG3014		Hornbeam	6	14	6.4	W	1	360	4.32	59	EM	G	Linear tree group, topo does not accurately record tree numbers or positions. In satisfactory overall condition. Understorey of shrubs, scrubby yew and western red cedar.	No action required at time of survey.	>40	B2	RET
TG3015	A7	Western red cedar x4, yew x2	6	8	3.2	S	2	225	2.70	23	SM	F	Two western red cedar at south-west to 14 metres and slender with it. Both collectively and individually unremarkable.	No action required at time of survey.	20+	C2	RET
TG3016		Scots pine x1, Austrian pine x1	2	17	5.4	S	3	600	7.20	163	EM	G	Pair share companion shelter and aerodynamic form. Good form and structure.	No action required at time of survey.	20+	B2	RET
TG3017	A7	Large leaved lime	14	28	6.5	8	5	600	7.20	163	M	G	Twin rows form feature avenue along existing track. Specimens have all re-grown from past heavy topping at approximately 8.5 metres. Very typical form from past management. Quite slender, upright crowns. Varying degrees of ivy present upon stems. Occasional moderate sized dead wood scattered through crowns. Second from east of north row has a basal cavity at north, third from west of south row has a smaller cavity at south. Overall a high quality landscape feature but should target occupancy increase then consideration must be given to crown stabilization pruning and ongoing management.	Girdle and remove ivy where present on stems from ground level to 2 metres. Re-assess if land use and occupancy level increases.	>40	A2	RET
TG3018		Crab apple x1, flowering cherry x1, Laburnum x1	3	6	3	2	2	240	2.88	26	M	F	Dispersed tree group. Centre cherry declining and laburnum at east suppressed. Overall a tree group of low quality and significance.	No action required at time of survey.	10+	C2	REM
TG3019		Beech x20, sycamore x2, hornbeam x2	24	12	5.5	2	2	200	2.40	18	SM	G	A linear tree group of understory trees on south boundary. Likely to be of hedgerow origin but lack of management has enabled components to become grown out. Conifers useful screen function.	No action required at time of survey.	>40	B2	RET
TG3020	A7	Sycamore x2, ash x1, Austrian pine x4	7	21	7	2	2	680	8.16	209	M	G	Partially off site tree group comprising a part of the treed screen to the south of the site. Sycamore and ash on site at north of ditch. Very dense ivy impedes inspection. Conifers useful screen function.	No action required at time of survey.	>40	B2	RET
TG3021	A7	Austrian pine x7, Scots pine x1, sycamore x3	11	2	6.6	N	5	600	7.20	163	M	G	The principal trees are the pines and these are located at the south of the ditch, off site. The understory scrub (diameter 300mm av.), is located at north of the ditch. Collectively confers useful screen function.	No action required at time of survey.	>40	B2	RET
TG3022		Sycamore x7, large leaved lime x1, ash x2	10	16	6	1	1	450	5.40	92	EM	G	Close-set tree group close to south boundary of the site. Typical form and structure for the species. Individually unremarkable but collectively conferring useful screen function.	No action required at time of survey.	>40	B2	RET
TG3023		Hawthorn	8	6	3	1	0	300	3.60	41	M	G	Specimens located at west of stream. All rather scrubby and very similar to components of the hedgerow. In satisfactory overall condition.	No action required at time of survey.	>40	B2	RET

FLAC Ref. No.	TPO Ref	Species	Tree Count	Ht. (m)	MRC5 (m)	Ht. 1 st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m ²)	Life Stage Y-SM-EM-M-DM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U+A-B-C	Proposal
TG3024		Ash x8, sycamore x8	16	20	8.5	4 S	4	600	7.20	163	M	G	Linear tree group. Ownership uncertain. Specimens share companion shelter and aerodynamic form. Upright stems. Dense ivy impedes inspection of principal branch structure. Overall in satisfactory condition and conferring useful screen function.	No action required at time of survey.	20+	B2	RET
TG3025		Hawthorn 35%, goat willow 30%, damson 35%	50	9	3	1	1	200	2.40	18	SM	G	Scrubby specimens to south of TG3024, providing very dense edge effect including shrub species such as elder, Buddleia, dog rose, brambles and ivy.	No action required at time of survey.	20+	C2	REM
TG3026	G14	Sycamore x6, ash x1	8	17	7.25	N	2.5	420	5.04	80	EM	G	Off site tree group beyond south boundary. Specimens share companion shelter and aerodynamic form. In satisfactory overall condition. Ash has larger stem diameter as noted on plan.	No action required at time of survey.	>40	B2	RET
TG3027	G14	Crack willow x4, sycamore x2	6	16.5	6	3	3	735	8.82	244	EM	F	Dispersed tree group. Set well back from boundary but included to enable shadow forecast. Remote inspection only.	No action required at time of survey.	20+	B2	RET
TG3028		Silver birch x3, Himalayan birch x1, purple plum x1, Norway maple cv. X1, rowan x1, Leyland cypress x1	8	11.5	3.82	N	2	300	3.60	41	EM	G	Off site linear tree group spanning the rear of three gardens. Assume stems 1 metre off boundary. In satisfactory overall condition.	No action required at time of survey.	20+	B2	RET
TG3029	A6	Hawthorn	2	4.5	2.52	W	1	350	4.20	55	M	F	A compact pair that are both very heavily suppressed and densely ivy clad. Tree group of relatively low significance.	No action required at time of survey.	20+	C2	RET
TG3030		Red horse chestnut	2	18	7.5	N	4	950	11.40	408	M	F	Pair share companion shelter and aerodynamic form. Both are quite an age and size for the species. The north-east tree has a significant crown bias to the north-east due to a wolf limb; this appears rather vulnerable to failure and pruning is advised to reduce the likelihood. North-east tree also displays some dieback and presence of dead wood that may affect the highway at east. Ultimately likely to be limited by realistic retention span.	Reduce the crowns of both red horse chestnuts by 2 metres radially and remove dead wood >15mm in diameter. Shorten the over-extended limb at north-east of the north-east tree by approximately 4 metres to more closely match the mean crown spread.	10+	C2	RET
TG3031	G12, G13	Common lime	2	19	5.65	W	5	650	7.80	191	M	G	Off site tree group. No access. Remote inspection only. A similar pair at the west end of a short, mixed species avenue along driveway. Typical form and structure for the species. Occasional moderate dead wood observed.	Remove dead wood >15mm in diameter.	>40	B2	RET
TG3032		Elder	3	5	3	1.5	0.5	350	4.20	55	M	G	Dispersed tree group. Smallest specimen in the middle. In satisfactory overall condition but ultimately of low arboricultural or landscape merit.	No action required at time of survey.	20+	C2	RET
TG3033		Ash	2	11.4	4.2	W	2	700	8.40	222	M	F	An off site pair. Both are very heavily ivy clad preventing any inspection of structure. Both have unusual form so it is likely that past failures of lateral limbs have taken place. Limited future potential.	No action required at time of survey.	10+	C2	RET
TG3034		Ash	7	15.5	7.33	W	2	600	7.20	163	EM	G	Linear tree group. Generally specimens have upright stems and share companion shelter and aerodynamic form. Dense ivy throughout the group impedes inspection. Occasional moderate dead wood. In satisfactory overall condition.	No action required at time of survey.	>40	B2	RET

FLAC Ref. No.	TPO Ref	Species	Area (m ²)	Ht. (m)	MRCS (m)	Ht. 1 st Br. (m)	Ht. Can. (m)	Specimen Stem Dia. (mm)	Specimen RPA Rad. (m)	Specimen RPA Area (m ²)	Life Stage V-SM-E-M-L-M-DM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10-20, >40	QV Grade U-A-B-C	Proposal	Area retained (m ²)	Area retained %
WG3001		Ash 40%, white poplar 25%, sycamore 25%, large leaved lime 5%, waihut 5%	3485	19	7.5	2	2	600	7.20	163	M	G	Occupies and area between the site and the railway track. Most principal trees are heavily ivy clad, the lower layers of this woodland group are also thick with ivy. Locally dense understorey making access difficult (understorey comprises hawthorn and alder with spindle tree, dog rose, goat willow, and dogwood). Thicketting to south provides edge effect and ecotone.	Thin out principal high canopy trees by 15% to allow greater light penetration. Control ivy throughout woodland group to prevent excessive cladding to the detriment of the host trees. Initiate a staged cutting regime to edges to increase robustness of the ecotone.	>40	B2	RET	3485	100.0

Data for hedges (H)

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-IM-OM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <10, 10+ 20+, >40	QV Grade U-A-B-C	Proposal
H3001	Beech	2.5	1.5	68	90	SM	G	Boundary of domestic garden. Clipped at west face and top edge. Confers useful screen function.	No action required at time of survey.	>40	B2	RET
H3002	Beech	2.2	1.8	76	80	SM	G	Boundary of domestic garden. Clipped. Confers useful screen function.	No action required at time of survey.	>40	B2	RET
H3003	Beech	2	2	18	70	SM	G	Boundary of domestic garden. Less frequently clipped than adjacent beech hedge.. Confers useful screen function.	No action required at time of survey.	>40	B2	RET

Data for hedgerows (HR)

FLAC Ref. No.	Species	Ht. (m)	Mean Width (m)	Length (m)	Mean Stem Dia. (mm)	Life Stage Y-SM-EM-M-GM	Phys. Condition G-F-P-D	Structural condition & Notes	Management recommendations	Ret. Span <1.0, 1.0+ 2.0+ >4.0	QV Grade U-A-B-C	Proposal	Length retained (m)	Percentage retained %
HR3001	Hawthorn 50%, dogwood 15%, elder 25%, sycamore 5%, ash 5%	6	7	130	400	M	F	Unmanaged hedgerow between fields is becoming grown out. Hedgerow plants present on both sides of stream but mostly on east side. Some small trees and saplings present. Could be rejuvenated. Confers useful screen function. Located at north boundary with railway. North side of hedgerow appears to be failed on occasion. Very dense screen with thickening brambles to south.	No action required at time of survey.	>4.0	B2	PRET	110	84.6
HR3002	Blackthorn 25%, hawthorn 25%, ash 8%, dog rose 7%, elder 35%	7	7	200	300	EM	G		No action required at time of survey.	>4.0	B2	RET	200	100.0

CAUTION - THIS DRAWING IS INTENDED TO BE READ IN COLOUR



<p>FORBES LAIRD ARCHITECTURAL CONSULTANCY</p>	<p>Client Castlefield International Ltd Teveham Road, Fulbourn</p> <p>Instruction ref. CCF7-025</p> <p>Dwg title Tree Survey, Retention / Removal</p> <p>Dwg no. 34-1018.02-A</p> <p>Rev A Date 04.09.14</p> <p>Scale 1:500 @ A0</p>	<p>Notes</p> <ul style="list-style-type: none"> Do not scale off, refer to tree survey data schedule for crown spreads etc Trees / hedge/edged areas follow the topo survey or aerial imagery, as applicable All tree positions are indicative Any trees limited from topo survey are located immediately adjacent to a topo survey RPA for hedges or hedgerows: <ul style="list-style-type: none"> - 3m from the centreline, or - half the height, or - width + 2m each side ...whichever is the greater Drawn to N unless otherwise indicated 	<p>Category A ● High</p> <p>Category B ● Moderate</p> <p>Category C ● Low</p> <p>Category U ● Unretainable</p> <p>● Trees to be retained ● Trees for removal to facilitate development</p> <p>● Trees for removal for arboricultural reasons</p> <p>● Indicating tree root protection area</p>
--	--	---	--

Thomas H. Jones
Registered Architect
140-150, 151-152 / 7-8, 153-154, 155-156
www.thomas-h-jones.com