

Land North of Dukes Meadow Drive  
Banbury

## **Arboricultural Impact Assessment**

Project Details	
<b>Client:</b>	Manor Oak Homes
<b>Project:</b>	Land North of Dukes Meadow Drive, Banbury
<b>Report Title:</b>	Arboricultural Impact Assessment
<b>Project Number:</b>	10791
<b>File Reference:</b>	10791_AIA.002 Rev A
<b>Date:</b>	23/09/2022

Copyright
The copyright of this document remains with Aspect Arboriculture Ltd. All rights reserved. The contents of this document therefore must not be copied or reproduced in whole or in part for any purpose without the written consent of Aspect Arboriculture Ltd.

Limitations
This assessment has been prepared in respect of the proposed development and should not be interpreted as a report on tree health and safety. Reasonable effort has been made to identify visible defects whilst undertaking the tree survey; trees are, however, prone to natural failure without warning therefore no guarantee can be made as to the absolute safety of any of the trees surveyed. Aspect's opinion of tree condition and structural potential is therefore valid for a limited period of 12 months from the date of inspection. Validity is assumed in the absence of inclement weather and no change to the trees' existing context. Reliance should not be given to comments made in respect of other disciplines i.e. landscape, ecology or civil engineering without first consulting an appropriate expert.

Liability
This report has been prepared for the exclusive use of the commissioning client and unless otherwise agreed in writing by Aspect Arboriculture Ltd. no other party may use or rely on the contents of the report. No liability is accepted by Aspect Arboriculture Ltd. for any use of this report, other than for the purposes for which it was originally prepared and provided. No warranty, express or implied, is made as to the advice in this report. The content of this report is partly based on information provided by third parties. Unless otherwise stated, information obtained from any third party has not been independently verified by Aspect Arboriculture Ltd.

Contact Details
<b>Aspect Arboriculture Ltd.</b> Hardwick Business Park   Noral Way   Banbury   Oxfordshire   OX16 2AF <b>t</b> 01295 276066 <b>f</b> 01295 265072 <b>e</b> <a href="mailto:info@aspect-arbor.com">info@aspect-arbor.com</a> <b>w</b> <a href="http://www.aspect-arbor.com">www.aspect-arbor.com</a>

# Contents

---

## Text:

Executive Summary .....	1
1    Introduction .....	2
2    Statutory Designations .....	3
3    Policy Review .....	3
4    Arboricultural Impact.....	5
5    Conclusions .....	7
6    Recommendations.....	8

## Tables:

Table 1. Net Tree Removals by BS5837:2012 Category.

## Appendices:

Appendix A	Tree Constraints Plan	10791 TCP 02
Appendix B	Tree Survey Schedule	10791 TS 02
Appendix C	Tree Protection Plan	10791 TPP 02 Rev A
Appendix D	Tree Survey Methodology	10791 TSM 01

## Executive Summary

- i) **Introduction.** Aspect Arboriculture are commissioned by Manor Oak Homes to prepare an Arboricultural Survey and Impact Assessment relating to proposed development of land north of Dukes Meadow Drive, Banbury.
- ii) **Proposals.** The development proposals seek planning permission for the residential development of the site, with associated infrastructure and landscaping.
- iii) **Surveys.** The site was surveyed by Aspect in June 2022 following the guidance contained within BS5837:2012. Copies of the tree survey information are available within appendices A and B.
- iv) **Statutory Designations.** Background checks have confirmed that the site does not occur within a Conservation Area and that there are no trees present on site which are afforded protection by a Tree Preservation Order. A single Ash and group of deciduous trees to the west (under the applicant's control), are afforded protection by TPO ref:001/1997. They are however outside the site boundary and will not be impacted by the proposals.
- v) **Arboricultural Impact.** The arboricultural impact of the proposed development is low and is described by net tree losses, totalling the partial removal of two areas of native scrub and a lapsed agricultural hedgerow. A preliminary tree protection drawing is appended to this document to demonstrate the deliverability of safeguarding measures. Conclusions drawn against Cherwell District Council's development control policies conclude that the development proposal is acceptable from the arboricultural perspective.

# 1 Introduction

## 1.1 Background & Proposals

- 1.1.1 Aspect Arboriculture are commissioned by Manor Oak Homes to prepare an Arboricultural Survey and Impact Assessment relating to the proposed development of land north of Dukes Meadow Drive, Banbury.
- 1.1.2 The development proposals seek planning permission for the residential development of the site, with associated infrastructure and landscaping.

## 1.2 Site Overview

- 1.2.1 The application area falls within the administrative control of Cherwell District Council, and comprises an arable field to the north of Duke Meadow Drive on the northern fringe of Banbury. The site is bound by agricultural hedgerow containing the occasional deciduous standard and group of trees. The site is surrounded by further arable land to the north and west. The eastern boundary abuts Hanwell sports fields although they are separated from the site by an assemblage of semi mature broadleaves and scrub. Land to the south benefits from proposals for residential development to be under application 21/03426/OUT.

## 1.3 Existing Tree Stock

- 1.3.1 The tree survey includes thirty-seven trees of individual distinction, thirteen groups of trees and three hedgerows; they have all been considered in full during the design stages of the project in accordance with BS5837:2012.
- 1.3.2 Trees within influence of the application area are confined to the site's field boundaries, with those of value predominantly occurring within the northern hedge-line. Ash and English Oak standards are irregularly distributed throughout the hedgerow, with those of value identified as trees which possess large and complete crowns which are showing signs of good health. They provide the site boundary with a strong sense of sylvan maturity and enclosure, providing a positive and important contribution to the site's amenity.
- 1.3.3 Of particular note are two veteran Ash (T2 and T17). Although T2 is not within direct influence of the application area, it is located immediately to its west and holds a prominent visual presence within views available from the site interior. Both Ash possess large trunk diameter in comparison to others of the same species and when assessed against published data<sup>1</sup>, they are large enough to be considered notable and possess a sufficient number of features commensurate to veteran tree status<sup>2</sup>; including an above average quantity of internal deadwood of large diameter, tear out wounds, fungal fruiting bodies, and a significant cavity at the base with active decay. In accordance with BS5837:2012 and current Natural England Standing Advice, both

<sup>1</sup> Lonsdale, D. (ed) (2013) Ancient and other veteran trees: further guidance on management. The Tree Council, London 212pp.

<sup>2</sup> Forbes-Laird, J. (2018) Recognition of Ancient, Veteran & Notable Trees – RAVEN.

T2 and T17 have been awarded enlarged veteran tree buffer zones equivalent to a radius of 17.9m and 16.2m respectively.

- 1.3.4 The remaining assemblage recorded within the tree survey is located along the southern and western boundaries, comprising of lapsed agricultural hedgerow and new hedgerow containing assemblages of semi mature trees. Whilst these features help define the site boundaries they provide a low contribution to the amenity of the site equivalent to BS5837:2012 category C i.e. trees of low quality.

## 2 Statutory Designations

### 2.1 Conservation Area

- 2.1.1 Background checks have confirmed that the site does not occur within a Conservation Area (Cherwell District Council, cited August 2022). Accordingly, the amenity value of the trees is not elevated to preserving or enhancing any unique or distinctive interest linked to the setting.

### 2.2 Tree Preservation Orders

- 2.2.1 Background checks have also confirmed that there are no trees within influence of the site that are afforded protection by a Tree Preservation Order (Cherwell District Council, cited august 2022). Although it is known that a single Ash (T2) and offsite collection of trees to the west is afforded protection by TPO ref:001/1997.

## 3 Policy Review

### 3.1 The National Planning Policy Framework

- 3.1.1 The NPPF (2021) provides planning policy guidance at a National level. Paragraph 131 of the Framework details the aspiration to secure increased tree cover within new developments, comprising both new tree planting, and the retention of existing trees where possible: '*Trees make an important contribution to the character and quality of urban environments, and can also help mitigate and adapt to climate change. Planning policies and decisions should ensure that new streets are tree-lined, that opportunities are taken to incorporate trees elsewhere in developments (such as parks and community orchards), that appropriate measures are in place to secure the long-term maintenance of newly-planted trees, and that existing trees are retained wherever possible.*'

- 3.1.2 Building upon paragraph 131, the Framework also considers that '*decisions should contribute to and enhance the natural and local environment by: recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of the best and most versatile agricultural land, and of trees and woodland*' (para 174b).

- 3.1.3 In respect of Veteran Trees and Ancient Woodland, paragraph 180c requires that development proposals award particular consideration to these important features; '*development resulting in the loss or deterioration of irreplaceable habitats (such as*

*ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists'.*

- 3.1.4 In addition, paragraph 180d also emphasizes the benefit that can be secured through the provision of public access to, and resultant appreciation of, retained tree cover, stating: '*...opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can... enhance public access to nature where this is appropriate.'*

### 3.2 Cherwell District Council

- 3.2.1 At a local level, Cherwell District Council has a statutory obligation to ensure adequate provision is made for the preservation of trees through Section 197 of the Town and Country Planning Act (1990). Cherwell District Council's Local Plan 2011-2031 (adopted July 2015) is understood to be the Council's primary development control document; Within which, Policies ESD 10, ESD 13 and ESD 15 are considered relevant to trees in the context of development (relevant parts reproduced below).

- 3.2.2 **POLICY ESD 10:** Protection and Enhancement of Biodiversity and the Natural Environment

*'Protection and enhancement of biodiversity and the natural environment will be achieved by the following:*

*The protection of trees will be encouraged, with an aim to increase the number of trees in the District.'*

- 3.2.3 **POLICY ESD 13:** Local Landscape Protection and Enhancement

*'Opportunities will be sought to secure the enhancement of the character and appearance of the landscape, particularly in urban fringe locations, through the restoration, management or enhancement of existing landscapes, features or habitats and where appropriate the creation of new ones, including the planting of woodlands, trees and hedgerows.'*

- 3.2.4 **POLICY ESD 15:** The Character of the Built and Historic Environment

*'Successful design is founded upon an understanding and respect for an area's unique built, natural and cultural context. New development will be expected to complement and enhance the character of its context through sensitive siting, layout and high quality design. All new development will be required to meet high design standards. Where development is in the vicinity of any of the District's distinctive natural or historic assets, delivering high quality design that complements the asset will be essential.'*

*New development proposals should:*

*Contribute positively to an area's character and identity by creating or reinforcing local distinctiveness and respecting local topography and landscape features, including*

*skylines, valley floors, significant trees, historic boundaries, landmarks, features or views, in particular within designated landscapes, within the Cherwell Valley and within conservation areas and their setting.'*

## 4 Arboricultural Impact

### 4.1 Net Tree Removals<sup>3</sup>

- 4.1.1 Trees are recommended for removal where: a) it is necessary and unavoidable to site development within proximity to existing trees, such that they cannot be confidently retained in the long-term as living features, and/or b), where the amenity value of the tree will be significantly reduced as a result of the proposals, particularly if already of a low retention priority.
- 4.1.2 Tree removals necessary to implement the proposed development are shown at Table 1 below, and can be quantified as the partial removal of two areas of native scrub and a lapsed agricultural hedgerow.

4.1.3 **Table 1:** Net Tree Removals by BS5837 Category.

Category A	Category B	Category C
None	None	<b>G1+Δ</b>
		<b>G5+Δ</b>
		<b>H1+Δ</b>

+ Denotes assemblage of three or more species (refer to appendix B)

Δ Denotes partial removal of tree group or hedge

- 4.1.4 Based on the submitted layout and access proposal, removals are expected to be limited to those required to gain vehicular access off Dukes Meadow Drive and via the permitted scheme to the south. It is highly unlikely that any further tree loss will be required following detailed design.
- 4.1.5 Removals major on low quality scrub and lapsed agricultural hedgerows of limited arboricultural merit. Subsequently, their absence will not harm the amenity of the site or the wider area and it will be possible to mitigate for their loss with replacement planting of a comparable scale and assemblage.

### 4.2 Vulnerable Trees

- 4.2.1 Based on the submitted layout, the proposals arboricultural impact arising through encroachment within root protection areas is expected to be low. The scheme has been designed to be outward facing, meaning boundary trees are separated from proposed development and buffered by linear areas of public open space and shared driveways.

---

<sup>3</sup>All tree works should be timed to avoid the main nesting season for birds between 1st March and 31st August. If scheduled within this period it is recommended that an ecologist is present to advise on any necessary protective measures, and on hand to confirm that tree works are not likely to cause disturbance to nesting birds.

- 4.2.2 Thorough consideration has been given as to how the proposed development will interact with the site's retained trees, especially where it is necessary to encroach within root protection areas. For example, hard surfacing has been amended throughout the iterative design process, to avoid and reduce RPA encroachment as far as design principles can allow. Where encroachment within RPAs is unavoidable, safeguards have been put in place to ensure the effect of retained trees will be acceptable and managed within the interests of the trees.
- 4.2.3 The extent and type of encroachment within retained trees RPAs is detailed within Table 2 below and is illustrated within the Tree Protection Plan provided within appendix C.
- 4.2.4 Table 2: RPA Encroachment by Type and Extent.

Supervised Excavation (m <sup>2</sup> /%)		
<b>T18</b>	34.8	14.6%
<b>T19</b>	3.1	6.5%
<b>T20</b>	18.2	3.3%
<b>T21</b>	0.3	<1%

- 4.2.5 With reference to Table 2, there are four instances where the introduction of hard surfaces will incur excavation within the peripheries of retained trees RPAs. In all instances, the excavation works effect only a minor proportion of their total RPAs and occur on the edge of their RPAs where roots are predicted to be low diameter and where their natural turnover is anticipated to be highest. In all cases, there is also an equivalent or larger area of undisturbed soft landscape conducive to their RPAs which is capable to supporting root growth and recovery. Therefore, by adopting the principles of BS5837 concerning manual excavation techniques and root pruning (with the added precaution of arboricultural auditing), it will be acceptable to permit the limited degree of excavation to occur without undue concerns for their future health or vitality.

### 4.3 Pruning Works<sup>4</sup>

- 4.3.1 The need for pruning work to accommodate the development proposal is also expected to be low and limited to crown lifting work where trees will be retained adjacent to internal roads.
- 4.3.2 To limit the need for pruning work, it is recommended that particular consideration is given during detailed design to ensure sufficient spatial separation is provided between trees of value and the built form. Should pruning work be required, it should be restricted to the shortening of secondary lower branches only, to avoid the potential for having a negative effect on health, vitality or amenity value.
- 4.3.3 Although not required to accommodate the development, it is recommended that throughout the entire site, dead branches are removed from the canopies of retained

<sup>4</sup> All tree works should be timed to avoid the main nesting season for birds between 1st March and 31st August. If scheduled within this period it is recommended that an ecologist is present to advise on any necessary protective measures, and on hand to confirm that tree works are not likely to cause disturbance to nesting birds.

trees to help relieve occupier's apprehension and mitigate the risk of future tree related hazards emerging. The removal of deadwood should be carried out in accordance with section 7.3 of BS3998:2010, by a competent tree contractor, to ensure that cuts are performed correctly and positioned so as to avoid future structural defects or physiological issues, facilitate growth and maintain aesthetic value.

#### 4.4 Protective Barriers

- 4.4.1 It will be important to protect retained trees' above-ground structures and underlying RPAs from damage during construction. To achieve this, tree protection barriers should be erected prior to the commencement of any works and consist of the barrier specification illustrated within the Tree Protection Plan at appendix C. The locations where protective fencing should be erected are illustrated within the Tree Protection Plan (Appendix C) with a bold blue line.

#### 4.5 Mitigation Replanting

- 4.5.1 The principle of tree removal generates a requirement for replacement planting, which has been recognised during design. Accordingly, the layout has been designed to provide opportunities for incorporating new and replacement tree planting throughout the site. Under separate instruction, Aspect Landscape Planning have prepared a Landscape Strategy Plan which outlines the preferred approach to incorporating new tree planting (ref. 5982/LSP/ASP3).
- 4.5.2 The Landscape Strategy Plan includes the introduction of a significant number of new trees throughout residential areas of the site and POS. the site's boundaries will be reinforced with new hedgerow and scrub planting which will assist in integrating the scheme within the setting. It is expected that detailed planting proposals which build on the principle of the LSP will be secured by condition.

### 5 Conclusions

- 5.1.1 Pursuant to Cherwell District Council's Policy requirements, the proposals have been informed by a survey of the existing tree stock using the guidance provided at BS5837:2012.
- 5.1.2 Based on the submitted layout, the direct arboricultural effect of the proposed development will be low. Removals major on the partial clearance of two areas of native scrub and a lapsed agricultural hedgerow, whose loss it will be possible to mitigate for with replacement planting.
- 5.1.3 The site's principle trees including the veteran Ash will be retained and integrated safely within the development proposals, and without risk of future pressure to undertake unsympathetic tree works. Hedgerows defining the site's remaining boundaries will also be retained and their function and integrity as boundary features will not be affected by the proposals.

- 5.1.4 The development presents ample opportunities to incorporate new tree planting within areas of POS which will provide an uplift in tree numbers and associated amenity benefits. A bespoke landscape strategy which demonstrates how this will be achieved is submitted separately.
- 5.1.5 A preliminary scheme for safeguarding retained trees has been prepared which relies on the use of standard barrier techniques and ground boarding, however this work should be reviewed / expanded during detailed design.
- 5.1.6 The proposed development is considered acceptable from the arboricultural perspective, subject to ongoing input during detailed design and the adoption of safeguards for protecting trees throughout construction. It is our overall conclusion that the proposals do not conflict with the Framework or Cherwell District Council's Policy ESD 10, ESD 13 and ESD 15.

## 6 Recommendations

- 6.1.1 A detailed Arboricultural Method Statement supported by 1:500 scale technical drawings should be prepared which expand on Appendix C. This could be secured by Condition. Details of proposed levels and service routes should be included; a scheme for auditing tree protection and subsequent reporting to the Council should feature explicitly throughout.

### Prepared By:

Patrick Haythornthwaite FdSc MArborA  
Principal Arboricultural Consultant

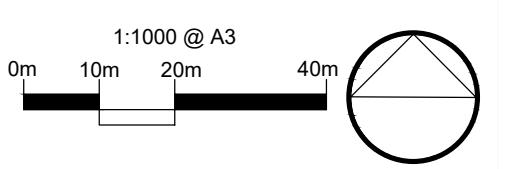
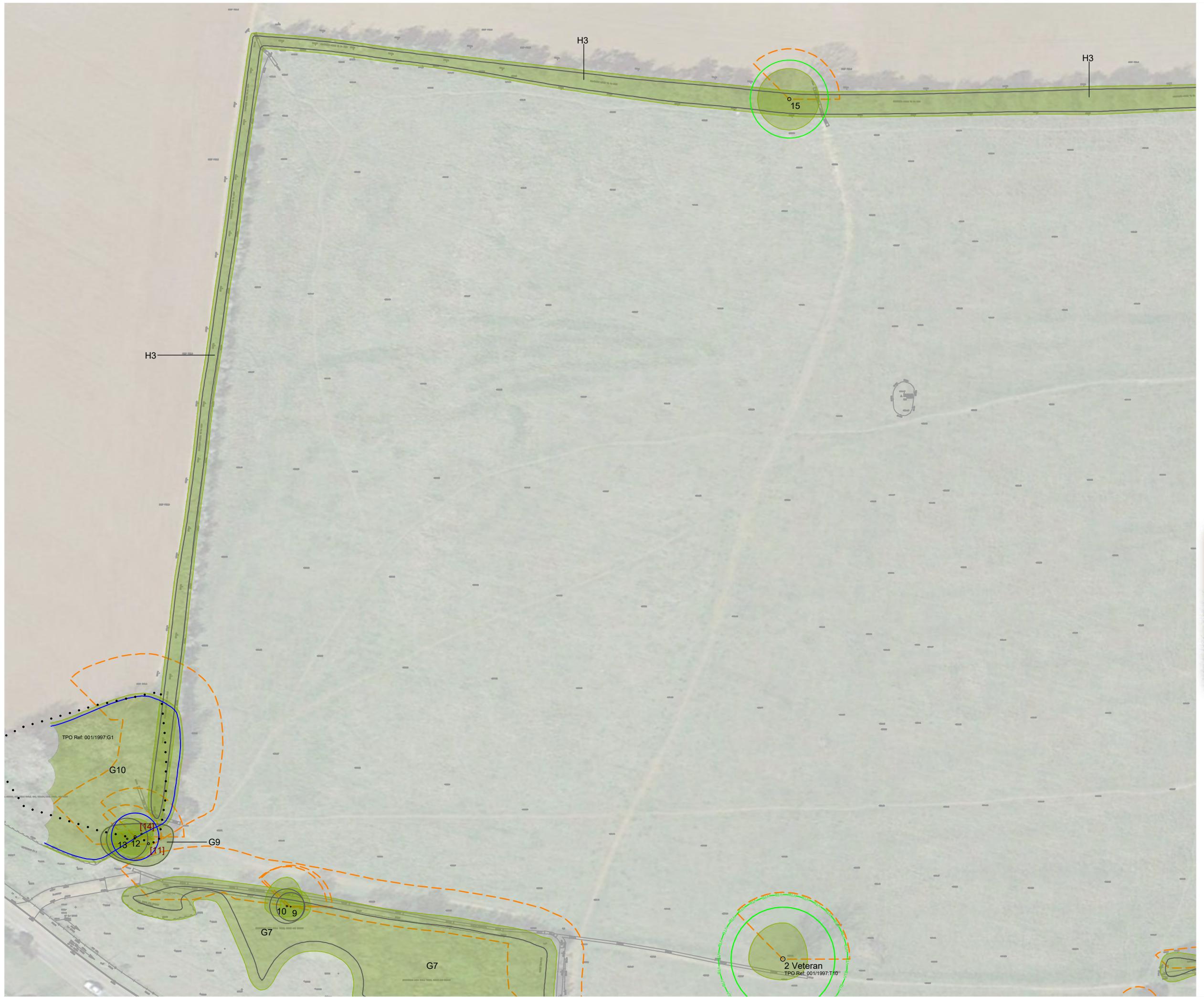
E: [patrick.haythornthwaite@aspect-arbor.com](mailto:patrick.haythornthwaite@aspect-arbor.com)  
T: 01295 276066

## APPENDICES

**APPENDIX A**

**TREE CONSTRAINTS PLAN (10791 TCP 02)**





- KEY:**
- Tree Numbers
  - Tree Canopies
  - Category 'A' RPA
  - Category 'B' RPA
  - Category 'C' RPA
  - Veteran Buffer
  - Intermittent Group
  - Shading Arc
  - Tree Preservation Order

Note: Trees 14, 31-33, Groups G1, G3, G4 & G7-G13 have been plotted using measurements onsite in conjunction with aerial imagery. Their locations were not recorded on the topographical survey of the site (drawing ref: 17525-7-853-865.dwg).



Cited from Google Earth

REV	DATE	NOTE	Drawn	Chkd
REVISIONS				

**aspect** arboriculture

**TITLE**  
Land North of Dukes Meadow Drive, Banbury  
**Tree Constraints Plan**

**CLIENT**  
Manor Oak Homes

SCALE	DATE	DRAWN
1:1000 @ A3	JUN 2022	GW
DRAWING NUMBER	REVISION	
10791 TCP 02 (1/5)		

Based on: 17525-7-853-865.dwg



Cited from Google Earth

REV	DATE	NOTE	Drawn	Chkd
REVISIONS				

**aspect** arboriculture

**TITLE**  
Land North of Dukes Meadow Drive, Banbury  
**Tree Constraints Plan**

**CLIENT**  
Manor Oak Homes

SCALE	DATE	DRAWN
1:1000 @ A3	JUN 2022	GW
<b>DRAWING NUMBER</b>		REVISION
10791 TCP 02 (2/5)		

Based on: 17525-7-853-865.dwg



REV	DATE	NOTE	Drawn	Chkd

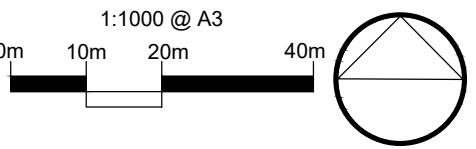
**aspect** arboriculture

TITLE  
Land North of Dukes Meadow Drive, Banbury  
Tree Constraints Plan

CLIENT  
Manor Oak Homes

SCALE 1:1000 @ A3	DATE JUN 2022	DRAWN GW
DRAWING NUMBER 10791 TCP 02 (3/5)	REVISION	

Based on: 17525-7-853-865.dwg



- Cited from Google Earth
- | REV | DATE | NOTE | Drawn | Chkd |
|-----|------|------|-------|------|
|     |      |      |       |      |
- aspects** arboriculture
- TITLE**  
Land North of Dukes Meadow Drive, Banbury  
Tree Constraints Plan
- CLIENT**  
Manor Oak Homes
- SCALE**  
1:1000 @ A3      **DATE**  
JUN 2022      **DRAWN**  
GW
- DRAWING NUMBER**  
10791 TCP 02 (4/5)      **REVISION**
- Based on: 17525-7-853-865.dwg



Cited from Google Earth

REV	DATE	NOTE	Drawn	Chkd
REVISIONS				

**aspect** arboriculture

**TITLE**  
Land North of Dukes Meadow Drive, Banbury  
**Tree Constraints Plan**

**CLIENT**  
Manor Oak Homes

SCALE 1:1000 @ A3	DATE JUN 2022	DRAWN GW
DRAWING NUMBER 10791 TCP 02 (5/5)	REVISION	

Based on: 17525-7-853-865.dwg

**APPENDIX B**

**TREE SURVEY SCHEDULE (10791 TS 02)**



**BS 5837:2012 Tree Schedule: Land North of Dukes Meadow Drive,  
Banbury**

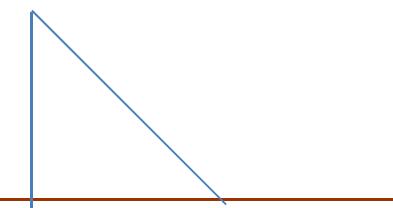
## BS5837:2012 Tree Survey: Explanation of Survey Criteria

Sequential reference number cited  
on all aspect drawing.

e.g.: young, semi-mature, early-mature,  
mature or over-mature

Area around tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of roots and soil structure is a priority. \*The RPA has been manipulated to allow for various site features, i.e. roads, structures or changes in levels. Please refer to the Tree Constraints Plan for these changes.

Height and Crown spread measured to the nearest half meter; # denotes where this is estimated.



Category prefix A-C denotes arboricultural quality, decreasing from A (high) to C (low); Subcategories 1, 2 and 3 highlight associated arboricultural (1), landscape (2) and ecological (3) qualities.

Category U trees are those in such a condition that they cannot be realistically retained as living trees in the current context for the long term.

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)					Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
-------------	---------------------	---------------------	------------	------------------	--	--	--	--	---------------------	------------	-------------------------	----------------------	----------	-----------------	----------------

Measured to the nearest 10mm; # denotes estimated diameter where access is not possible.

e.g.: above-average, average, below average or dead

General observations, i.e. defects, preliminary management recommendation, presence of pests/disease, perceived significance.

Height of first significant branch and/or canopy

e.g.: good, indifferent, poor, or hazardous

Colour band key:

Category A	
Category B	
Category C	
Category U	

The following survey should not be interpreted as a report on tree health and safety. Aspect's opinion of tree condition and structural potential is valid for a limited period of 12 months from the date of inspection. Validity is assumed in the absence of inclement weather and no change to the trees existing setting.

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)	
				N	E	S	W									
1	Ash	295 285 255 170	11	6.25	6	6	6	2.25	1.5	Early Mature	Average	Indifferent	Situated within H1 Multi stemmed from ground level, poor tight unions Unremarkable example of the species	C1	6	
2	Ash	1195	18.5	10	6.75	5.75	9.5	4.25	2	Veteran	Below Average	Indifferent	Large wounds to the northern aspect of stem from ground level c.1.5m Large diameter tear out wounds throughout the scaffold structure Upper canopy appears sparse with die back throughout Lower canopy has vigorous growth Wood pecker holes throughout the scaffold structure Considered to be of veteran status due to very large girth for the species and declining features	A123	14.4 17.9 Veteran Tree Buffer	
3	Silver Birch	340	13.5	5	4.5	5	4.5	1.5	0.25	Early Mature	Average	Indifferent	Dominant component of G2 Average internal deadwood Prominent within views from adjacent road	B2	4.2	
4	Goat Willow	20*30#	5					2.5	0.25	0.25	Semi Mature	Average	Indifferent	Situated within roadside grass verge Multi-stemmed from ground level Low arboricultural quality	C12	1.5
5	Goat Willow	20*30#	5					2.5	0.25	0.25	Semi Mature	Average	Indifferent	Situated within roadside grass verge Multi-stemmed from ground level Low arboricultural value	C12	1.5
6	Whitebeam	140	7	2.75	3	2.75	2.25	1.5	0.5	Semi Mature	Below Average	Indifferent	Situated within roadside grass verge Vigorous basal epicormic growth Readily replaceable at current size Low arboricultural value	C12	1.8	
7	Whitebeam	155	7	3.25	2.75	3	3	1.75	1	Semi Mature	Below Average	Indifferent	Situated within roadside grass verge Vigorous basal epicormic growth Readily replaceable at current size Low arboricultural value	C12	1.8	
8	Horse Chestnut	310	5	3.25	4.25	3.75	4	0.25	1.5	Early Mature	Below Average	Poor	Squat crown form Low vigour Unremarkable example of species	C12	3.6	

Land North of Dukes  
Meadow Drive, Banbury

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)	
				N	E	S	W									
9	Goat Willow	220 170 150 #	11.5	5.25	5.5	4#	3#	0.75	0.5	Semi Mature	Average	Indifferent	Inaccessible due to dense understory Forks from c.0.5m, poor tight included union Frontage component of G1	C12	3.9	
10	Goat Willow	250 200 190 130	11	8	4.5#	3#	6.25	0.75	0.5	Semi Mature	Average	Indifferent	Inaccessible due to dense understory Forks from c.1m, poor tight included union Frontage component of G1	C12	4.8	
11	Scots Pine	630 oi	7					0	0	0	Early Mature	Dead	Hazardous	Clad and obscured by dense ivy, unable to thoroughly inspect Standing Deadwood	U	N/A
12	Scots Pine	560 oi	13.5	5#	5#	5	6.5#	8	7	Early Mature	Below Average	Indifferent	Trunk clad and obscured by ivy, unable to thoroughly inspect Sparse canopy at time of survey Above average deadwood within the lower canopy Dominant component of G3	B2	6.6	
13	Scots Pine	470#	9.5	2#	7	6.5#	6#	5#	3.5#	Early Mature	Average	Indifferent	Inaccessible due to dense understory Suppressed by T4 Unremarkable example of the species	C1	5.7	
14	Scots Pine	390#	3					0	0	0	Early Mature	Dead	Hazardous	Trunk Failure at c.3m Standing deadwood Hazardous	U	N/A
15	English Oak	720 520 at c.1.75m oi	14	8.5	8.25	8.5	8.75	3	0.5	Mature	Average	Indifferent	Situated within H3 Trunk clad and obscured by ivy, unable to thoroughly inspect Forks at c.1.25m, union appears sound Average internal deadwood and epicormic growth throughout Minor tear out wounds throughout scaffold structure Principal component of the northern boundary Good example of the species at maturity	A12	10.8	
16	Apple	335	8.5	5	5	3	2#	1.5	1	Early Mature	Average	Indifferent	Situated within H3 Trunk leans to the east from ground level, corrects at c.2.75m Large tear out wound to the southern aspect from ground level to c.1m, heartwood exposed Unremarkable example of the species	C12	3.9	

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
				N	E	S	W								
17	Ash	1080	22	13#	9#	9.75	11	6.5	4.75	Veteran	Average	Indifferent	Large cavity to the eastern aspect of the trunk from c.1.75m to c.3.5m, trunk is completely hollow Rowan sapling has established within the cavity Large partially occluded wound to the southern buttress Multiple minor cavities to the western aspect of the trunk Above average deadwood Occasional crossing and fused limbs within crown Prolific basal epicormic growth Considered to be of veteran status due to very large girth for the species and declining features	A123	16.2
18	Ash	260 250 265 280 180 395 235 220 100 90	11.5	9#	9	8	8.25	1	0.5	Early Mature	Average	Indifferent	Situated within H3 Multi stemmed from ground level, dominant stem has failed at c.0.5m Multiple poor tight unions at ground level Crossing scaffold limbs throughout crown Unremarkable example of the species	C1	8.7
19	Hawthorn	190 170 140 130 #	8	5.5 to the south				3.5#	2.75#	Early Mature	Average	Indifferent	Situated within H3 Inaccessible due to dense understory Multi stemmed from ground level, union obscured by understory Unremarkable example of the species	C12	3.9
20	English Oak	1110	17	8#	11.5	10	12	4.75	0.5	Mature	Average	Indifferent	Situated within H3 Multiple large diameter limb failures to the northern aspect of crown Barb wire is attached to the northern aspect of the trunk at c.1m Above average large diameter deadwood within the northern aspect of the canopy Dominant component of the northern boundary collection	A2	13.2
21	Ash	740	15	10#	9.25	11.25	9.25	3.25	3.5	Mature	Below Average	Indifferent	Dominant component of G11 Slightly sparse upper canopy Above average internal deadwood Moderate example of the species at maturity	B12	9
22	Ash	380#	13	6#	7.25	5.5	1#	7#	5#	Early Mature	Average	Indifferent	Inaccessible due to dense understory Slight lean to east from ground level Unbalanced scaffold structure Unremarkable example of the species	C1	4.5

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
				N	E	S	W								
23	Ash	400 300 280 270 150 100	11	6#	5	4.75	5	1.75	1.75	Early Mature	Below Average	Poor	Situated within H3 Inaccessible due to dense understory Multi stemmed from ground level to c.2m, occasional stems crossing and fused Minor tip die back throughout Unremarkable example of the species	C1	7.2
24	Ash	2* 285 260 235	14	9	4.75	7.75	6.5	1.5	0.5	Early Mature	Average	Poor	Multi stemmed from ground level, tight unions Unremarkable example of the species	C1	6.3
25	Ash	470 270 250 #	15	7.5#	6.25	7.5	7.75	2.5	1	Early Mature	Average	Indifferent	Inaccessible due to dense understory 2no sub dominant stems at c.025m from western aspect of the base Unsympathetic limb removals to the northern aspect from ground level to c.5m Above average deadwood within the lower canopy Unremarkable example of the species	C1	7.2
26	Ash	235 150	9	6.5	4.75	4	3#	1.5	0.5	Semi Mature	Average	Indifferent	Sub dominant stem at c.0.5m to the western aspect, poor tight union Unbalanced scaffold structure Unremarkable example of the species	C12	3.3
27	Crack Willow	650 560 500	14	9.5	9#	10.25	9.5	1.5	0.5	Mature	Below Average	Hazardous	Multi stemmed from ground level, unions obscured by soil build up Previous reductions at c.3m, management now lapsed Multiple large diameter limb failures at pollard points Anticipate major structural failure, unlikely to offer a long term future contribution	U	N/A
28	Ash	130 3* 100 3* 90 #	8			3.75 to west		2	2	Mature	Average	Poor	Component of G6 Inaccessible due to dense understory Unremarkable example of the species	C12	2.7
29	Ash	220#	9			4 to the west		1	1	Semi Mature	Average	Indifferent	Component of G6 Inaccessible due to dense understory Unremarkable example of the species	C1	2.7
30	Ash	140	9	3.5#	2.25	2	1.75	3.5	3.75	Semi Mature	Below Average	Indifferent	Component of G6 Inaccessible due to dense understory Unremarkable example of the species	C1	1.8
31	Goat Willow	4* 100 2* 90 #	6.5			4.75 to the north		1.5	1.5	Semi Mature	Average	Indifferent	Component of G5 Inaccessible due to dense understory Unremarkable example of the species	C12	2.7

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)	
				N	E	S	W									
32	Goat Willow	110 4* 90	7			3 to the north		0.5	0.5	Semi Mature	Average	Indifferent	Component of G5 Inaccessible due to dense understory Unremarkable example of the species	C12	2.4	
33	Goat Willow	105 100 3* 95 3* 70	5	4	4.75	4#	3.75		0.5	0.5	Semi Mature	Average	Indifferent	Component of G1 Unremarkable example of the species	C12	3
34	English Oak	270	8.5	3.5	5#	5#	3.75		2	1.25	Semi Mature	Average	Indifferent	Component of G13 Unremarkable example of the species	C12	3.3
35	Goat Willow	4* 100 7* 90 #	7	4.5	4#	5#	3.5#		0.5	0.5	Semi Mature	Average	Indifferent	Component of G13 Southern stems have grown through neighbouring boundary fence Unremarkable example of the species	C12	3.6
36	English Oak	335	9	4.5	5.5	5.5#	5.75		1.75	0.75	Semi Mature	Average	Indifferent	Component of G13 Unremarkable example of the species	C1	3.9
37	English Oak	280	9.5	3.75	3.5	3.25	4		2.25	2	Semi Mature	Average	Indifferent	Standalone specimen Unremarkable example of the species	C1	3.3
G1	Ash Cherry Goat Willow Hawthorn Gorse Guelder Rose Cherry	150 max	6 max			1.25 av	0.5 av	0.5 av	Young to Semi Mature	Below Average	Indifferent	Intermittent native scrub boundary group Readily replaceable at current size Low arboricultural value	C12	1.8		
G2	Beech Cherry Goat Willow English Oak	230 max	9.5 max			4 av	1 to 2.5	1 to 2	Semi Mature	Average	Indifferent	Intermittent group of seven establishing roadside plantings Readily replaceable at current size Low arboricultural value	C12	2.7		

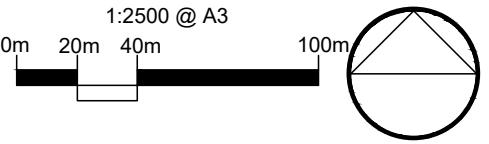
Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)	
				N	E	S	W									
G3	Ash															
	English Oak															
	Field Maple															
	Goat Willow															
	Fastigiate Oak															
	Hawthorn	350 max	10 max					5 max	0.5 to 3	0.5 to 5	Young to Early Mature	Below Average	Indifferent	Roadside collection of established plantings Forms mutually suppressed and cohesive canopy Contributes to screen of adjacent road Individually of low significance, moderate value as collective	B2	3.9
	Cherry															
	Goat Willow															
	Common Gorse															
	Hazel															
G4	Privet															
	Silver Birch															
	Cherry															
	Ash	250 max	9 max					4.75 max	1 av	1 av	Young to Semi Mature	Average	Indifferent	Roadside collection of established plantings Forms mutually suppressed and cohesive canopy Contributes to screen of adjacent road Individually of low significance, moderate value as collective	B2	3
G5	English Oak															
	Field Maple															
	Dogwood															
	Blackthorn															
	Cherry	100 av	2 to 6					1.5 av	0.5 av	0.5 av	Young to Semi Mature	Average	Indifferent	Planted native scrub within highway verge Unremarkable examples of the species	C12	1.2
	Goat Willow															
G6	Ash															
	Silver Birch															
	Hazel	100 av	5 av					2.5 av	0.5 av	0.5 av	Semi Mature	Average	Indifferent	Overgrown, unmanaged field boundary hedgerow Low arboricultural value	C12	1.5
	Blackthorn															
	Aspen															
	Hazel															
	Dogwood															
	English Oak															
	Gelder Rose															
	Lime															
	Cherry															
	Field Maple															

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)
				N	E	S	W								
G7	Osier														
	Goat Willow														
	Hazel														
	Walnut	270													
	Crack Willow	200													
	Apple	190	12 max												
	Dogwood	#													
	Hawthorn	max	6 av												
	Cotoneaster														
G8	Elder														
	Cherry														
	Blackthorn														
	Silver Birch														
	Crack Willow														
	Goat Willow														
	Osier														
	Elder														
G9	Privet														
	Dogwood														
	Guilder Rose														
	Hawthorn														
	Hazel														
	Walnut	75 max	5 av												
	Blackthorn														
	Silver Birch														
	Crack Willow														
G10	Goat Willow														
	Osier														
	Elder	160													
	Cherry	100													
	Horse Chestnut	90													
	Scots Pine	av	5 av												
	Rowan														
	Hawthorn														
	Hazel														
G11	English Oak	350 max	16 max												
	Lime														
	Elder														
	Spindle														
	Apple														
	Privet														
G12	Ash	150# av	9 av												

Tree Number	Common Species Name	Trunk Diameter (mm)	Height (m)	Crown Spread (m)				First Significant Branch (m)	Crown Clearance (m)	Life Stage	Physiological Condition	Structural Condition	Comments	BS5837 Category	RPA Radius (m)	
				N	E	S	W									
G12	Goat Willow															
	Hawthorn															
	Ash															
	Cherry	165 av	8 max					3.5 max	0.5 av	0.5 av	Semi Mature	Average	Indifferent	Intermittent collection on unremarkable individual components	C12	2.1
	Gorse													Predominantly readily replaceable at current size		
G13	Blackthorn													Low arboricultural value		
	Silver Birch															
	Goat Willow															
	Silver Birch	75 av	5 av					2.5 av	0.5 av	0.5 av	Young to Semi Mature	Average	Indifferent	Small collection of colonising self set specimens	C12	0.9
H1	Dogwood															
	Guelder Rose															
	Hazel															
	Hawthorn															
	Dogwood															
	English Oak	4*80 av	5 av					3.25 av	0.25 av	0.25 av	Semi Mature to Early Mature	Average	Indifferent	Unmanaged intermittent field boundary hedgerow	C12	1.8
H2	Goat Willow															
	Blackthorn															
H3	Blackthorn	4*125 3*90 av	6 max					3.5 av	0.25 av	0.25 av	Semi Mature to Early Mature	Average	Indifferent	Unmanaged intermittent field boundary hedgerow	C12	3.6
	Hawthorn															
	Elder	190 100 90 # max	7 max					3.5 max	0.5 av	0.5 av	Semi Mature	Average	Indifferent	Unmanaged intermittent field boundary hedgerow	C12	2.7
	Blackthorn															

**APPENDIX C**

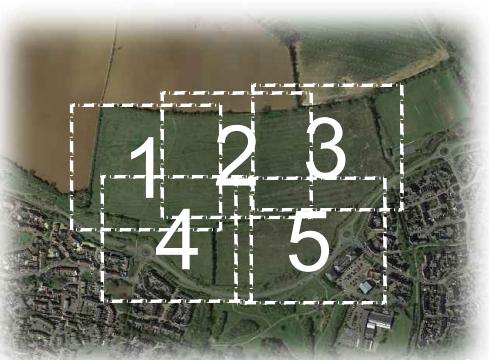
**TREE PROTECTION PLAN (10791 TPP 02 Rev A)**



#### KEY:

- Tree Numbers
- Tree Canopies
- Category 'A' RPA
- Category 'B' RPA
- Category 'C' RPA
- Veteran Buffer
- Intermittent Group
- Tree Preservation Order
- Trees to be Removed
- Tree Protection Barrier
- Tree Protection Barrier (2nd Position)
- Manual Excavation

Note: Trees 14, 31-33, Groups G1, G3, G4 & G7-G13 have been plotted using measurements onsite in conjunction with aerial imagery. Their locations were not recorded on the topographical survey of the site (drawing ref: 17525-7-853-865.dwg).



Cited from Google Earth

REV	DATE	NOTE	Drawn	Chk'd
REVISIONS				

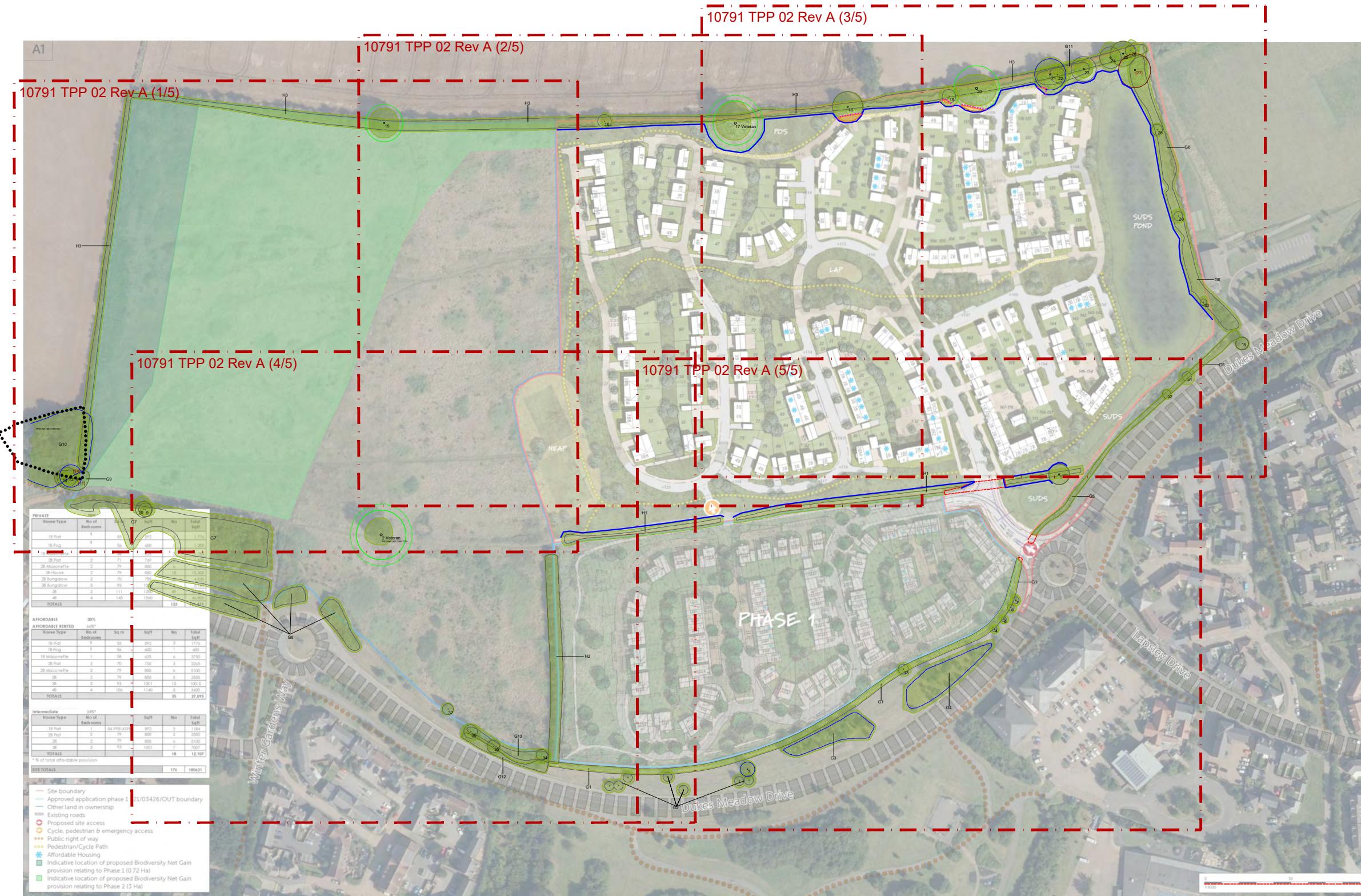
**aspect** arboriculture

TITLE  
Land North of Dukes Meadow Drive, Banbury  
Tree Protection Plan

CLIENT  
Manor Oak Homes

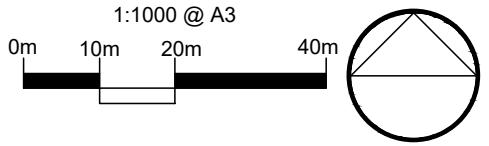
SCALE	DATE	DRAWN
1:2500 @ A3	SEP 2022	GW
DRAWING NUMBER		REVISION
10791 TPP 02 Rev A (Overview)		A

Based on: MANO220426 SKL-02 P3.pdf



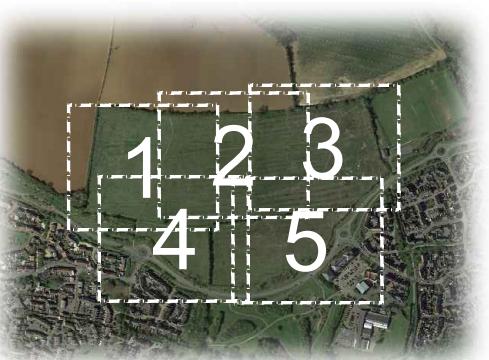






- KEY:**
- ∅ 15 Tree Numbers
  - ∅ Tree Canopies
  - ∅ Category 'A' RPA
  - ∅ Category 'B' RPA
  - ∅ Category 'C' RPA
  - VTB Veteran Buffer
  - ∅ Intermittent Group
  - Tree Preservation Order
  - 8(•) Trees to be Removed
  - Tree Protection Barrier
  - Tree Protection Barrier (2nd Position)
  - Manual Excavation

Note: Trees 14, 31-33, Groups G1, G3, G4 & G7-G13 have been plotted using measurements onsite in conjunction with aerial imagery. Their locations were not recorded on the topographical survey of the site (drawing ref: 17525-7-853-865.dwg).



Cited from Google Earth

REV	DATE	NOTE	Drawn	Chkd
REVISIONS				

**aspect** arboriculture

**TITLE**  
Land North of Dukes Meadow Drive, Banbury  
**Tree Protection Plan**

**CLIENT**

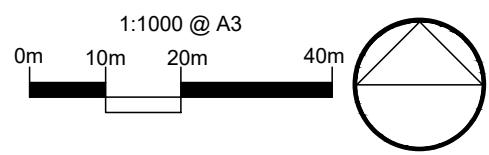
**Manor Oak Homes**

SCALE	DATE	DRAWN
1:1000 @ A3	SEP 2022	GW / TR
DRAWING NUMBER		REVISION
10791 TPP 02 Rev A (3/5)		A

Based on: MANO220426 SKL-02 P3.pdf







- Cited from Google Earth
- | REV | DATE | NOTE | Drawn | Chkd |
|-----|------|------|-------|------|
|     |      |      |       |      |

**aspect** arboriculture

**TITLE**  
Land North of Dukes Meadow Drive, Banbury  
Tree Protection Plan

**CLIENT**  
Manor Oak Homes

**SCALE** 1:1000 @ A3    **DATE** SEP 2022    **DRAWN** GW / TR

**DRAWING NUMBER** 10791 TPP 02 Rev A (5/5)    **REVISION** A

Based on: MANO220426 SKL-02 P3.pdf

**APPENDIX D**

**TREE SURVEY METHODOLOGY**

## Tree Survey Methodology

The tree survey is a form of Visual Tree Assessment undertaken during August 2022. Tree locations are identified via a topographical survey; locations of any trees excluded from the topographical survey were plotted on site. The purpose of the survey is to record information about trees on or adjacent to the site to inform design options. In keeping with clause 4.4 of BS5837: 2012 ‘Trees in Relation to Design, Construction and Demolition’, the survey provides a record of the following parameters:

**Tree Numbers:** all individual trees are sequentially numbered. Groups of trees, woodlands and hedgerow are also sequentially numbered with a corresponding prefix relevant to their type e.g. G, W or H respectively; the identification of trees as woodland, groups of trees or within hedgerows is undertaken where appropriate. The identification of trees as individuals within collections has been made where it is considered sensible to make such a differentiation.

**Species:** listed by common name

**Stem Diameter:** given in millimetres and obtained by measuring single/multiple stems at 1.5m using a diameter tape in accordance with Annex C within BS5837:2012. Diameters of inaccessible trunks are estimated and provided with the suffix '#'.

**Tree Heights:** determined using a clinometer and measured to the nearest 500mm. Heights are estimated where specific triangulation is not achievable and by reference to measured trees nearby (provided with the suffix '#').

**Crown Spreads:** measured at cardinal points using a Leica Disto™ laser distance measurer. Measurements were recorded to the nearest 250mm. Inaccessible crown spreads are estimated based on measured canopies nearby and provided with the suffix '#'

**Crown Clearance:** The height of the first significant living branch and/or canopy (as appropriate) is recorded using a Leica Disto™ laser distance measurer to inform vertical ground clearance. Crown clearance may be higher or lower than the first significant branch. Estimated clearances are provided with the suffix '#'. Height of first significant branch will be provided where considered advantageous to make the distinction.

**Life Stage** – The age of trees, groups of trees, hedges and woodlands are defined as follows:

- Young (within the first 1/4<sup>th</sup> of life expectancy)
- Semi-mature (within the second 1/4<sup>th</sup> of life expectancy)
- Early Mature (within the third 1/4<sup>th</sup> of life expectancy)
- Mature (within the fourth 1/4<sup>th</sup> of life expectancy)
- Over Mature and Veteran (exceeding normal life expectancy)
- Veteran (significantly exceeding normal life expectancy)

**Physiological and structural condition:** physiological condition defined as follows; good, above average, average, below average, poor or dead. Structural condition is defined as: good, moderate, indifferent, poor or hazardous

**Comments:** further observations were recorded where necessary i.e. details regarding defects, preliminary management recommendations, presence of pest/disease and perceived significance.

**BS5837 Category:** pursuant to BS5837:2012 section 4.5 and cascade chart for tree quality assessment (refer to reproduced Table 1 overleaf). Trees qualifying under a given category (A-C and U) and any appropriate subheading (1-3) are considered to fall within the scope of that category's definition.

**Estimated Remaining Contribution.** Described` as a guideline only and in terms of years: <10, 10+, 20+ and 40+ relevant to category U, C, B and A respectively. This information is not provided on the tree schedule to avoid conclusions based upon 'life expectancy'.

Table 1 Cascade chart for tree quality assessment

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

landscape planning • ecology • arboriculture

aspect

Aspect Arboriculture Ltd  
South Court  
Hardwick Business Park  
Noral Way  
Banbury  
Oxfordshire OX16 2AF

T: 01295 276066  
F: 01295 265072  
E: [info@aspect-arbor.com](mailto:info@aspect-arbor.com)  
W: [www.aspect-arbor.com](http://www.aspect-arbor.com)