

Gavray Drive, Bicester

Arboricultural
Impact
Assessment
(Incorporating Tree
Protection
Measures)

Prepared by:
The Environmental
Dimension
Partnership Ltd

On behalf of: **L&Q Estates**

July 2021 Report Reference edp0124_r055a

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(edp0124_r040)

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(Ref: 239_P12)

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(edp0124_d168a 15 July 2021 TC/LT)

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Section 1 Introduction

- 1.1 This Arboricultural Impact Assessment (AIA) has been prepared by the Environmental Dimensions Partnership Ltd (EDP) on behalf of L&Q Estates ('the Applicant') in relation to the proposed development of Gavray Drive, Bicester (hereafter referred to as 'the Site').
- 1.2 It sets out the nature and extent of tree losses and provides mitigation and protection measures to ensure the viable long-term retention of retained trees in the context of the development proposals.

Site Context

1.3 The Site is located to the east of Bicester, which is located within the Local Planning Authority (LPA) of Cherwell District Council (CDC). It currently comprises a number of disused field parcels, with extensive natural regeneration.

Development Proposals

- 1.4 An Outline planning application is to be submitted to CDC for residential development for up to 250 dwellings including affordable housing and ancillary uses including retained Local Wildlife Site (LWS), public open space (POS), play areas, localised land remodelling, compensatory flood storage, structural planting and access.
- 1.5 This AIA has been prepared using EDP's arboricultural constraints information contained within the Arboricultural Baseline Note as **Appendix EDP 1**.
- 1.6 This baseline survey data was collected by EDP in March 2020. The survey data specifically relevant to this Site is provided within **Appendix EDP 1**, with the Tree Constraints Plan included.

Aims and Objectives

1.7 The purpose of this AIA is to assess the impacts upon the tree stock from the proposed development and demonstrate which trees can be retained and which will require removal. In addition, it will provide mitigation measures, such as protective fencing, to ensure the safe, long-term retention of any retained tree should the development be permitted.

Relevant Baseline Documents

1.8 EDP's Arboricultural Baseline Note is relevant to the provisions of this AIA and this AIA should be read in conjunction with it where applicable.

- 1.9 The following best practice guidance and informative standards are relevant to the provisions of the AIA and should be read in conjunction with the AIA where applicable:
 - BS 5837: 2012 'Trees in Relation to Design, Demolition and Construction Recommendations' BSI 2012; and
 - BS 3998:2010 Tree Work Recommendations. BSI 2010.

Section 2 Arboricultural Impact Assessment

- 2.1 This Arboricultural Impact Assessment (AIA) has been prepared following Site-based observations, a desktop study of the baseline survey data and consideration of the Open Space Parameter Plan (**Appendix EDP 2**). In particular, it relates to the Tree Constraints Plan (contained within **Appendix EDP 1**), which is overlaid onto the proposed Open Space Parameter Plan. The resulting drawing, a Tree Retention and Removal Plan (**Plan EDP 1**).
- 2.2 This AIA recognises that construction activities pose a threat to subject trees if treated inappropriately and assesses the likely impacts of the proposals on the tree stock and where appropriate, provides mitigation with the view of achieving a harmonious relationship between the trees and the built form.
- 2.3 Assessment of the impact of the proposals has been determined following consideration of the constraints each surveyed item poses by virtue of its position, branch spread and designated Root Protection Area (RPA).
- 2.4 Consideration should be given to retaining all trees where possible. However, ultimately the removal of any tree is dependent on its proximity to the footprint of any proposal and associated landscaping.

Items Impacted by Development Proposals

2.5 Assessment of the Open Space Parameter Plan (**Appendix EDP 2**) determines that two items are impacted by the development proposals; these are detailed within **Table EDP 2.1**. two items are category B, of moderate quality and three items are category C, of low quality.

Table EDP 2.1: Items Impacted by Development Proposals.

Ref.	Species	Impact	Category Grading
Number			
G2	Blackthorn (Prunus spinosa)	Partial Removal	В
	Common ash (Fraxinus excelsior)		
	Field maple (Acer campestre)		
Н3	Blackthorn (Prunus spinosa)	Partial Removal	С
	English elm (Ulmus procera)		
G21	Blackthorn (Prunus spinosa)	Partial Removal	С
	Common ash (Fraxinus excelsior)		
	Common hawthorn (Crataegus monogyna)		
	English oak (Quercus robur)		
	English elm (Ulmus procera)		
	Willow sp. (Salix sp.)		

Ref.	Species	Impact	Category Grading	
Number				
G35	Blackthorn (<i>Prunus spinosa</i>)	Partial Removal	С	
	Common ash (Fraxinus excelsior)			
	Common hawthorn (Crataegus monogyna)			
	English oak (Quercus robur)			
	English elm (<i>Ulmus procera</i>)			
	Willow sp. (Salix sp.)			
G37	Blackthorn (Prunus spinosa)	Partial Removal	В	
	Common ash (Fraxinus excelsior)			
	Common hawthorn (Crataegus monogyna)			
	English oak (Quercus robur)			
	Field maple (Acer campestre)			
	Hornbeam sp. (Carpinus sp.)			

Summary of Tree Losses and Retention

2.6 A summary of the tree losses and retention based upon the Open Space Parameter Plan (**Appendix EDP 2**) is provided within **Table EDP 2.2**. In this context, the term 'affected' means the partial removal of a retained item.

Table EDP 2.2: Summary of Tree Losses and Retention.

	Existing	Trees, Groups and Hedgerows Lost Due to Proposals	Trees, Groups and Hedgerows Affected by Proposals	Trees, Groups and Hedgerows Unaffected by Proposals
Category A	4	0	0	4
Category B	25	0	2	23
Category C	6	0	3	3
Totals	35	0	5	30

Damage to Rooting Environment during Construction Activities

2.7 The required RPA for each item is described in the tree survey schedule and depicted on the Tree Constraints Plan both found within **Appendix EDP 1**. To ensure appropriate protection is afforded to the roots, the extent of the RPA shall be defined by means of the installation of protective barriers in accordance with the recommendations given in Section 6.2 of BS 5837:2012, the specification for which is enclosed as **Appendix EDP 3**.

Mitigation

2.8 Existing trees identified for retention on the appended Tree Retention and Removal Plan Plan (**Plan EDP 1**) will continue to be managed in accordance with BS 5837:2012. Critically this requires arboricultural review of any future emerging detailed design and the implementation of physical protection measures to safeguard the retained trees,

including robust protection in the form of a barrier to BS 5837:2012 (**Appendix EDP 3**), during the construction phases. The importance of such matters cannot be overlooked if a successful outcome is to be ensured.

2.9 Should any trees be affected by the proposed development at the detailed design stage, these will be sensitively worked around to minimise any adverse effects. This can be achieved with the use of ground protection, no-dig technologies, hand digging and access facilitation pruning, where applicable. This level of detail will be assessed during the detailed design stage.

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Section 3 Conclusions

- 3.1 Masterplanning of the development has been informed by arboricultural recommendations throughout and has retained the majority of the surveyed items. To ensure succession to the existing tree stock new planting is recommended. The new planting has potential for longevity within the landscape and will enhance the species diversity for the Site, whilst also contributing to the green infrastructure for the area.
- 3.2 Existing trees identified for retention on the appended Tree Retention and Removal Plan (**Plan EDP 1**) will continue to be managed in accordance with BS 5837:2012. Critically, this requires arboricultural review of any alteration to the development layout and the implementation of physical protection measures to safeguard the retained trees, including robust protection in the form of a barrier to BS 5837:2012, during the demolition and construction phases. The importance of such matters cannot be overlooked if a successful outcome is to be ensured.
- 3.3 A suitably worded condition can secure any mitigation measures which would be required to minimise harm and ensure safe, long-term retention to trees.

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Gavray Drive, Bicester Arboricultural Impact Assessment edp0124_r055a

Appendix EDP 1
Arboricultural Baseline Note
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Gavray Drive, Bicester Arboriculture Baseline Note edp0124 r040a

1. Introduction

- 1.1 The Environmental Dimension Partnership Ltd (EDP) has been commissioned by L&Q Estates ('the Applicant') to undertake a BS 5837:2012 *Trees in Relation to Design, Demolition and Construction* compliant survey of trees in relation to the proposed development of Gavray Drive, Bicester (hereafter referred to as 'the Study Area').
- 1.2 EDP is an independent environmental planning consultancy with offices in Cirencester, Cardiff and Cheltenham. The practice provides advice to private and public sector clients throughout the UK in the fields of landscape, ecology, archaeology, cultural heritage, arboriculture, rights of way and masterplanning. Details of the practice can be obtained at our website www.edp-uk.co.uk.
- 1.3 The Study Area is located to the east of Bicester, which is located within the Local Planning Authority of Cherwell District Council (CDC). It currently comprises a number of disused field parcels, with extensive natural regeneration.

2. Methodology and Limitations

- 2.1 The methodology adopted for this survey is based on guidelines set out in BS 5837:2012 *Trees in Relation to Design, Demolition and Construction*, especially Section 4.4, 'Tree Survey'. Site trees and other significant vegetation are as noted on the Tree Constraints Plan (**Annex EDP 1**) and this data has been derived from the Topographic Survey (drawing number: 35753). All surveyed items are detailed in **Annex EDP 2**. No other trees are covered by this survey.
- 2.2 All trees have been visually inspected from ground level unless otherwise stated, with no climbing or further detailed investigative tests being undertaken. The comments on their condition are based on observable factors present at the time of inspection. All measurements are metric and have been recorded in accordance with the measurement conventions set out in Section 4.4.2.6 of BS 5837:2012.
- 2.3 Any recommendations given regarding longer-term management are made on the basis of optimising the life expectancy of site trees, given their current situation and any effects that may result from the development proposals.



- 2.4 The schedule in **Annex EDP 2** provides information about the following factors in accordance with Section 4.4.2.5 of BS 5837:2012:
 - Sequential reference number (recorded on **Annex EDP 1**);
 - Species;
 - Height;
 - Stem diameter;
 - Branch spread;
 - Canopy clearance above ground level;
 - Life stage;
 - Physiological condition;
 - Structural condition;
 - Comments/notes;
 - Recommendations (and tree work priority);
 - Estimated remaining contribution;
 - Category grading; and
 - Root protection radius.
- 2.5 Due to the changing nature of trees and other site circumstances, this report and any recommendations made are limited to a 24-month period from the survey date. Any alterations to the Study Area could change the current circumstances and may invalidate this report and any recommendations made.
- 2.6 Trees are dynamic structures that can never be guaranteed 100% safe; even those in good condition can suffer damage under average conditions. Regular inspections can help to identify potential problems before they become acute.
- 2.7 A lack of recommended work does not imply that a tree is safe and likewise, it should not be implied that a tree will be made safe following the completion of any recommended work.



2.8 The subject trees have not been tagged for identification purposes.

3. Aims and Objectives

- 3.1 The purpose of this Technical Note is to:
 - Identify principal trees suitable for retention; and
 - Identify the constraints associated with retained trees to inform the design and layout of any forthcoming proposals and, in turn, inform an Arboricultural Impact Assessment.

4. Summary of Tree Stock

- 4.1 The survey has identified 21 individual trees, 13 groups of trees and one hedgerow, totalling 37 items. Of these 35 items, four have been categorised as A, of high quality, 25 have been categorised as B, of moderate quality; and six have been categorised as C and are of low quality.
- 4.2 All surveyed items are as noted on **Annex EDP 1** and detailed in the schedule at **Annex EDP 2**.
- 4.3 An illustrative summary of the species diversity, age distribution and grading categorisation for the Study Area is provided in **Annex EDP 3**.
- 4.4 Overall, the items identified across the Study Area are primarily of high or moderate value, with the exception of six category C items. These category A and B items are located within the existing field boundaries and therefore, with considerate masterplanning, would not adversely constrain the main body of the Study Area.

5. Statutory Protection

Tree Preservation Orders and Conservation Areas

- 5.1 Historic consultation, in 2014, with CBC ascertained that one Tree Preservation Orders (TPO) is registered against the study area (Ref: TPO 17 (1990)). The extents of items afforded protection under this TPO are depicted on **Annex EDP 1** with a yellow bounding box. Further consultation will be undertaken to clarify if further TPO's have been registered against the study area.
- 5.2 The Study Area is not within a designated conservation area.



6. National and Local Planning Policy

National Planning Policy Framework

6.1 The National Planning Policy Framework (NPPF) assumes protection of all ancient woodland and veteran trees unless there are exceptional reasons for not doing so. The importance of ancient woodland and veteran trees as irreplaceable habitats is set out in paragraph 175c of the NPPF, which states:

"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."

6.2 11 veteran trees, alongside a further seven transitional items, have been identified during the survey process. Full information on these trees are provided in **Schedule EDP 1** and further discussed in **Section 8** of this report.

Natural England and Forestry Commission Standing Advice: Ancient Woodland, Ancient Trees and Veteran Trees: Protecting them from Development

6.3 In respect of veteran trees, the standing advice from Natural England and the Forestry Commission¹ recommends that any development should be kept as far as possible from veteran trees, leaving a buffer of at least 15 times larger than the diameter or 5m from the edge of its canopy, if this is greater. The buffer is illustrated on **Plan EDP 1** and is discussed further in **Section 8**.

7. Protected Wildlife and Trees

Bats

7.1 All species of British bat are listed as European Protected Species (EPS) on Schedule 2 of the Conservation Regulations (Annex IV (a) to the Habitats Directive). This affords bats protection under the Conservation of Habitats and Species Regulations 2017 (as amended); further information is provided in **Annex EDP 4**.

Nesting Birds

7.2 The main bird nesting season is between March and August inclusive. Current legislation relating to breeding birds, under the Wildlife and Countryside Act 1981 (as amended) and the Countryside and Rights of Way Act 2000, confirms that birds, as well as their nests and eggs are protected. Further information is provided in **Annex EDP 4**.

 $^{^1\,}https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences\#history.$



8. **Site Specific Constraints**

- 8.1 As shown by Annex EDP 1, the surveyed items located across the Study Area are primarily self-sown trees of low or no arboricultural value.
- 8.2 A number of items are located outside, but adjacent to the Study Area, and therefore these items are not under the control of the Applicant and require consideration. The above- and belowground constraints from off-site items will need to be considered in during the design process.
- 8.3 11 veteran trees have been identified during the survey process within the application site. A veteran tree, by a recognised criterion, shows features of biological, cultural or aesthetic value that are characteristic of, but not exclusive to, individuals surviving beyond the typical age range for the species².
- 8.4 A further 7 items have been identified as transitional veterans; these items exhibit a number of the criteria required for designation as a veteran. At the time of survey the characteristics have not developed enough to justify designation as a veteran. However, these items should be prioritised for retention as veteranisation will continue and these trees will provide a valuable ecological and environmental contribution to the site and the wider landscape.
- 8.5 It is recommended that any development should be kept as far as possible from the veteran and transitional veteran trees, with a buffer area maintained between the items and any development boundary.
- 8.6 Natural England and Forestry Commission's standing advice suggests a buffer at least 15 times larger than the diameter of the veteran tree or 5 metres from the edge of the canopy, whichever is greater. The Root Protection Area (RPA)/buffer area should be allowed to develop into a semi-natural habitat and incorporated into Public Open Space (POS). No construction should take place within the RPA or buffer and development, such as gardens, should not been included within the RPA/buffer as there is limited control over how they may be used, or developed in the future.
- 8.7 The buffer has also been applied to a number of transitional veteran items. This has been done at the discretion of the arboricultural consultant, whereby it is felt that the tree will benefit from the additional protection afforded.
- 8.8 Further information on above and below ground arboricultural constraints is provided in Annex EDP 5.

² Natural England Ancient woodland and veteran trees: protecting them from development https://www.gov.uk/topic/planning-development/protected-sites-species.



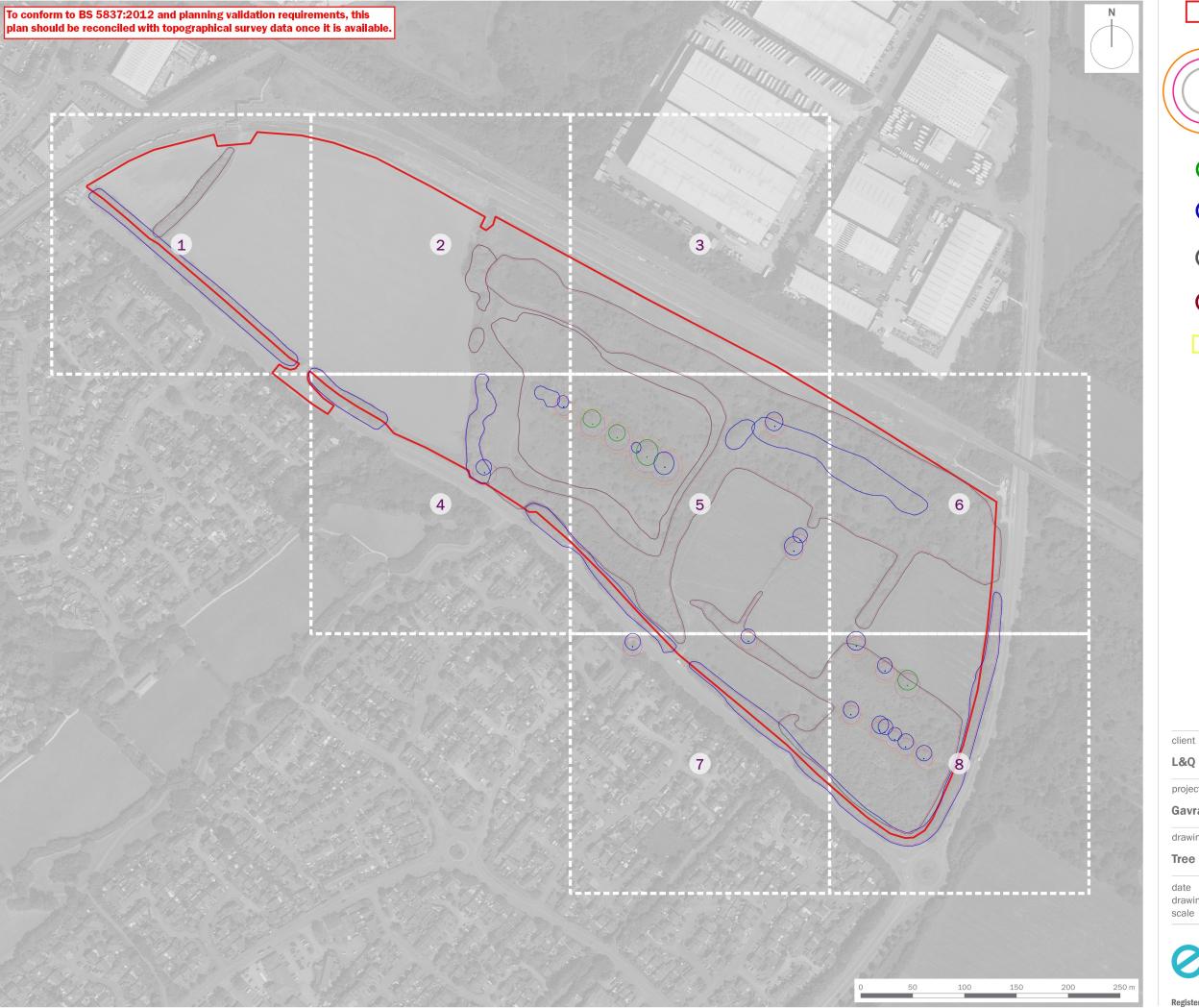
9. Conclusion

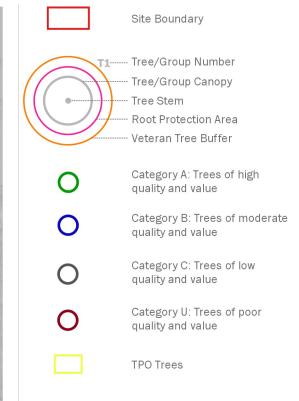
- 9.1 Of the items surveyed, 4 have been categorised as A, of high quality, and 25 have been categorised as B, of moderate quality. These items should be prioritised for retention, where practicable. These items are primarily off-site and around the perimeter of the Study Area and therefore do not adversely constrain development.
- 9.2 The default position when designing any forthcoming scheme should be the retention of all items, as so far as is practicable, regardless of category grading. All trees provide positive environmental and ecological contributions, irrespective of current condition.
- 9.3 The arboricultural constraints information provided within this Technical Note will feed into the detailed design and layout of the scheme and, in turn, will be used to undertake an Arboricultural Impact Assessment, to be submitted as part of the planning application.

Gavray Drive, Bicester Arboriculture Baseline Note edp0124_r040a



Annex EDP 1
Tree Constraints Plan
(edp0124_d131b 15 July 2021 JTF/LT)





L&Q Estates

project title

Gavray Drive

drawing title

Tree Constraints Plan Overview

15 JULY 2021 drawn by JTF drawing number edp0124_d131b scale 1:3,500 @ A3 checked LT QA RB



the environmental dimension partnership

