



West of Ifield, Crawley Arboricultural Impact Assessment

WOI-HPA-DOC-AIA-01
Version 1 - Planning submission

July 2025





Arboricultural Report

for planning purposes

West of Ifield

Crawley

West Sussex

RH11

July 2025

230265-PD-11N

Project Reference	230265-PD-11N – West of Ifield
Report Type	Arboriculture (Planning)
Author	Chris Wright
Checked by	Tim Moya
Date Checked	17 Apr 2023
Original Issue Date	18 Apr 2023
Most Recent Version	03 Jul 2025

The contents of this report are copyright of Tim Moya Associates and may not be altered or amended without the author's permission. Tim Moya Associates Standard Limitations of Service apply to this report, and all associated work relating to this site.

CONTENTS PAGE

1	INTRODUCTION	4
	INSTRUCTION	4
	AUTHOR	4
	PROPOSED DEVELOPMENT	4
	SCOPE.....	5
	SITE SURVEY	5
	REPORT PREPARATION	7
	DEFINITION OF TERMS.....	8
2	SITE INFORMATION	10
	CURRENT SITE USE	10
	GEOTECHNICAL INFORMATION	11
3	TECHNICAL ARBORICULTURAL DETAILS	13
	LANDSCAPE DETAILS	13
	BS5837 DETAILS	14
	STATUTORY PROTECTIONS	16
	ANCIENT WOODLANDS.....	16
	T395 (POPLAR DNA ANALYSIS).....	17
4	PLANNING POLICY AND GUIDANCE	19
	NATIONAL	19
	LOCAL.....	20
5	ARBORICULTURAL IMPACT ASSESSMENT	22
	REMOVALS	22
	MITIGATION GREENING	24
	PRUNING.....	25
	IMPACT ON VETERAN TREES & ANCIENT WOODLAND.....	25
	DELIVERY OF CORE INFRASTRUCTURE (DETAILED & OUTLINE COMPONENTS).....	27
	DELIVERY OF CHARACTER AREAS (OUTLINE COMPONENT)	28
	DELIVERY OF PUBLIC OPEN SPACES (OUTLINE COMPONENT).....	28
	PLANNING POLICY CONSIDERATIONS	29
6	CONCLUSIONS	31
7	APPENDICES CONTENTS.....	33

1 INTRODUCTION

Instruction

1.1 This Arboricultural Report ('the Report') has been instructed by Ramboll UK Ltd ('the Client'), on behalf of Homes England ('the Applicant').

Author

1.2 This Report was written by Christopher Wright ('the Author'). Christopher is an arboricultural consultant dealing with trees in relation to all forms of human activity including built development. He is a Technician Member of the Arboricultural Association, a member of the Royal Forestry Society, a member of the Institute of Chartered Foresters, holds the Level 6 Diploma in Arboriculture (ABC), the Professional Tree Inspection certificate (LANTRA), and has received a BSc (Hons) Conservation and Environment (2:1) from Writtle University College.

Proposed development

1.3 The West of Ifield site ('the Site') falls within the administrative area of Horsham District Council ('HDC' and hereafter 'the LPA').

1.4 The Applicant intends to submit a hybrid planning application (part outline and part full planning application) (the HPA) for a phased, mixed-use development (the Proposed Development) which is described as follows.

1.5 This planning application seeks hybrid planning permission (part outline and part full planning permission) for a phased, residential-led mixed-use development at Land West of Ifield.

1.6 The full element covers enabling infrastructure including the Crawley Western Multi-Modal Corridor (Phase 1, including access from Charlwood Road and crossing points) and access infrastructure to enable servicing and delivery of secondary school site and future development, including access to Rusper Road, supported by associated infrastructure, utilities and works.

1.7 The outline element (with all matters reserved) includes up to 3,000 residential homes (Class C2 and C3), commercial, business and service (Class E), general industrial (Class B2), storage or distribution (Class B8), hotel (Class C1), community and education facilities (Use Classes F1 and F2), gypsy and traveller pitches (sui generis), public open space with sports pitches, recreation, play and ancillary facilities, landscaping, water abstraction boreholes and associated infrastructure, utilities and works, including pedestrian and cycle routes and enabling demolition.

- 1.8 Further details on the Proposed Development, the Description of Development, and the proposed land uses, are set out within the Development Specification and Parameter Plan Framework (WOI-HPA-DOC-DSPPF-01) and the Design and Access Statement (WOI-HPA-DOC-DAS-01).
- 1.9 This HPA is for a phased development intended to be capable of coming forward in distinct and separable phases and/or plots in a severable way, which in the context of trees is considered to be feasible - specifically, because the full Phase 1 component of the Proposed Development is isolated to the core infrastructure, with all other areas currently being prepared on a parameter basis to an outline degree of detail.
- 1.10 For clarity, as per the Parameter Plans, no details are currently provided for the setting-out of individual plot areas (otherwise known as Character Areas). Such details are fully reserved for subsequent Reserved Matters applications.
- 1.11 Whilst not part of the Proposed Development, the Applicant proposes to separately deliver a sensitively designed east-west pedestrian cycle connection, appropriate to the local context, across the southern part of the off-Site Ifield Brook Wood and Meadows. A separate arboriculture report will be provided in conjunction with these separate proposals, following appropriate design of the pedestrian cycle connection.

Scope

- 1.12 This Report has been provided to assist all parties involved in the planning process, in accordance with British Standard 5837:2012 - Trees in relation to design demolition and construction - Recommendations (i.e., 'BS5837').
- 1.13 The effects on the visibility of the trees and on all relevant Character Areas have been excluded from this Report as these effects have been assessed within ES Volume 1, Chapter 11 (Landscape and Visual Impact Assessment), which is submitted alongside this document as part of the hybrid planning application.

Site survey

Survey date

- 1.14 The Site (see Figure 1) was surveyed during July and August 2019 by Arcadis, at a time that predated TMA's involvement in the project. It is understood that this data has already formed part of the design process and is therefore considered to be established data, as part of the design stage. For this reason, it was not considered necessary to update the full data at this time.

1.15 The Site has therefore not been fully re-surveyed as part of this Report; however, a one-day walkover of the Site was undertaken on the 30th of March 2023 by Kit Hardy (a colleague of the Author with an MSc Arboriculture and Urban Forestry). The purpose of this walkover was to obtain photographic evidence of the Site and to check whether any obvious and significant deviations from the previously captured data exist in the context of BS5837. No significant issues were identified and the data is considered to be suitably reliable for the purposes of this Report.

1.16 Furthermore, a visit to a portion of the Site to the west of Rusper Road was undertaken by the Author on the 22nd of January 2024, in order to gather individual tree data in an area that had previously only been subject to plotted tree groups. This data has been incorporated into the prior tree survey data (at Appendix A) and the tree numbering commences from T610; the schedule for these newly-surveyed trees is provided separately at Appendix B.

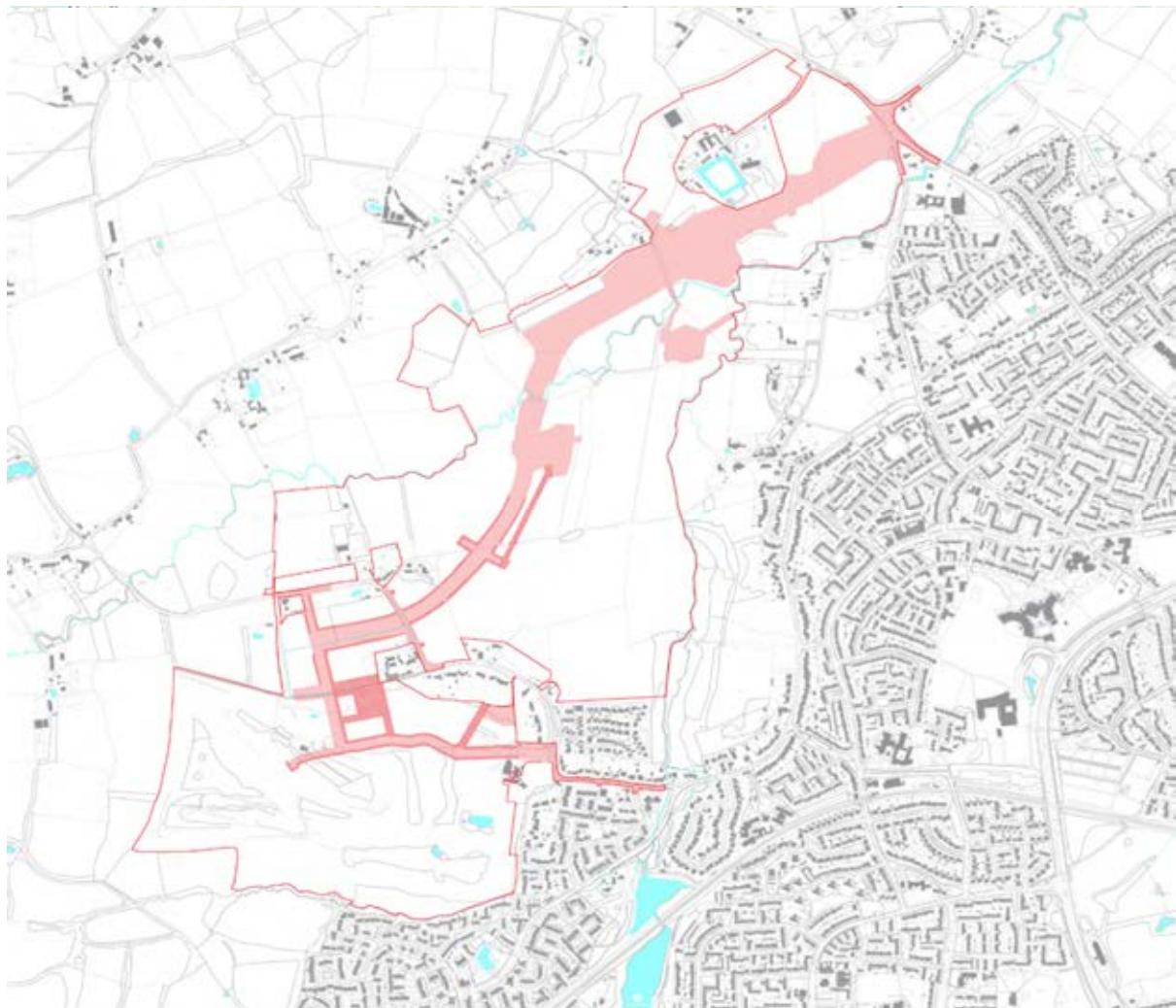


Figure 1: Site location.

- 1.17 For any future applications for Reserved Matters (RMA) where an individual land parcel is submitted for approval (i.e., after the HPA is approved), an area-specific tree survey will need to be undertaken, to ensure that the subsequent detailed designs are developed on accurate arboricultural data, reflective of the land area at the time that designs are further developed.
- 1.18 It is considered reasonable for a new numbering system to be developed, based on refined arboricultural data, though if the existing numbering system can be retained for future data collection then that may potentially be desirable.
- 1.19 Overall, this was an approach that was agreed with the LPA (i.e., Horsham District Council) during a virtual meeting with the planning officer and tree officer on the 15th of December 2023. In particular it was agreed that arboricultural assessment should include consideration of all elements of built development, including proposed underground utilities. However, it was agreed this was only possible at the detailed design stage and would be included within future RMAs. For Phase 1 works, an AMS would be needed as a planning condition.

Health and safety

- 1.20 Neither the one-day walkover nor the 2024 survey were an assessment of the health and safety of the trees (i.e., the visits were not to any degree an investigation of the condition of any of the trees) and it is understood that such an assessment of the trees was previously undertaken as part of the 2019 survey. No particular works in the context of health and safety management have therefore been specified, based on prior visits to Site by TMA.

Report preparation

External documents

- 1.21 This Report has been prepared, with reference to the following supplied documents and information:
 - Arcadis Tree Survey Report (WOI-AUK-XX-WS-RP-EC-0004-01) dated November 2019;
 - Nicholas Jones Consultants Arboricultural Assessment (NJCL 892) dated the 4th of March 2021 (note: this is a more detailed assessment of veteran and ancient trees compared to the 2019 data referred to above);
 - Parameter Plan 1 - Landscape and Public Realm (WOI-HPA-PLAN-PP01-01);
 - Parameter Plan 2 - Movement and Access (WOI-HPA-PLAN-PP02-01);

- Parameter Plan 3 - Land Use (WOI-HPA-PLAN-PP03-01);
- Parameter Plan 4 - Building Heights (WOI-HPA-PLAN-PP04-01);
- Parameter Plan 6 Planning Application Tree Removal Plan (WOI-APP-PP06);
- West of Ifield Site Wide Design Code (WOI-HPA-DOC-SWDC-01);
- Arcadis Phase 1A Landscape Typologies Plan (10051123-ARC-300-1A-DR-LA-00001_P01.4);
- Arcadis Phase 1B Landscape Typologies Plan (10051123-ARC-300-1B-DR-LA-00001_P01.4); and
- Arcadis Phase 1B Landscape Typologies Plan (10051123-ARC-300-1B-DR-LA-00002_P01.4).

1.22 It is important that this Report is read in conjunction with the Parameter Plan 6: Planning Application Tree Removal Plan (WOI-APP-PP06), because this plan sets out the overarching strategy with regard to the retention and the removal of trees. It is the fundamental intention that trees would be retained in all appropriate instances, in the context of future detailed designs.

1.23 It is also recommended that this Report is read in the context of the Design Code document (WOI-HPA-DOC-SWDC-01), which sets out the broader spatial design strategy for the Site.

Appendices

1.24 The appendices of this Report include:

- *Appendix A* (tree survey plans);
- *Appendix B* (tree schedules and other arboricultural information); and
- *Appendix C* (tree removals table - based on *Parameter Plan 6* referenced at paragraph 1.20).

Definition of terms

1.25 The following terms and abbreviations may be used within this Report. These terms are defined by BS5837 as follows, unless provided without quotation marks:

- **Arboricultural Method Statement ('AMS')** - "*methodology for the implementation of any aspect of development that is within the root protection area, or has the potential to result in loss of or damage to a tree to be retained*".

- **Local Planning Authority ('LPA')** - the planning department of the borough, district, or metropolitan council (for the planning application this is *Horsham District Council*),.
- **Root Protection Area ('RPA')** - "*layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and rooting volume to maintain the tree's viability, and where the protection of the roots and soil structure is treated as a priority.*
- **Service(s)** - "*any above- or below-ground structure or apparatus required for utility provision*" that may for example include "*drainage, gas supplies, ground source heat pumps, CCTV and satellite communications*".
- **Tree Protection Plan ('TPP')** - "*scale drawing, informed by descriptive text where necessary, based upon the [finalised] proposals, showing trees for retention and illustrating the tree and landscape protection measures*".

Arboricultural impact definitions

1.26 With regard to arboricultural impacts to retained trees, where this Report makes reference to any degree of impact, the following definitions apply unless it is otherwise stated:

- **Low impact** - The form and/or condition of the affected tree (or tree group, etc.) is considered unlikely to be affected to any particular degree, and by extension its visual qualities and life expectancy would not be undermined and its BS5837 categorisation is consequently unlikely to change.
- **Moderate impact** - The form and/or condition of the affected tree (or tree group, etc.) may be affected to such a degree that its visual qualities and life expectancy could be undermined and its BS5837 categorisation consequently may be subject to change.
- **High impact** - The form and/or condition of the affected tree (or tree group, etc.) is considered likely to be affected to such a degree that its visual qualities and life expectancy would likely be undermined and its BS5837 categorisation is consequently likely to change.

2 SITE INFORMATION

Current Site use

- 2.1 The Site comprises an area of approximately 171 hectares (ha) and is predominantly occupied by a mixture of arable and pastoral fields intersected by hedgerows and watercourses, with the River Mole passing through the northern part of the Site, and areas of woodlands and rear gardens of adjacent private residential properties along the boundaries of the Site (see Figure 2 - Figure 6). The Site also has the Ifield Golf Course and Country Club (hereafter referred to as the 'golf course') in the south. The Site topography is generally low-lying, with ridges to the south and west.
- 2.2 The Site is located along the western edge of the neighbourhood of Ifield. Current vehicle access to the Site is via Charlwood Road in the north and Rusper Road to the south. Several public Rights of Way pass through the Site.



Figure 2: Showing the general nature of the golf course area of the Site that comprises open areas flanked by scattered groups of trees (as is typical of a golf course).



Figure 3: Showing the typical characteristics of the agricultural area of the Site, in this instance showing the area including G455, T456, and T458 (left).

Geotechnical information

British Geological Survey

- 2.3 The *British Geological Survey* ('BGS') provides publicly available information, regarding the general soil properties of an area, including the underlying bedrock and any superficial deposits that overlay the bedrock. This information indicates that the majority of the Site is situated upon a bedrock of *Weald Clay Formation* (comprising mudstones that includes clays), with limited areas of superficial alluvium recorded in the area of watercourses (the River Mole and its tributaries) running across the Site.
- 2.4 Further details about the geology of the Site can be found in the *Ramboll Phase 1 Environmental Site Assessment (Ground Conditions)* (WOI-HPA-DOC-GCA1-01), dated the 26th of February 2025, and ES Volume 1 Chapter 6: Agriculture and Soils.

Root morphology

2.5 Soils where the clay content is significant will tend to encourage tree root growth at shallower depths - often, within the upper 600mm of soil¹. Where other soil components are present to greater extents, root morphology may differ, though impermeable layers of heavy compacted clay may restrict penetrative root growth, which may influence how far roots radiate from the stem of the tree to acquire nutrients.



Figure 4: Showing the River Mole that abuts and intersects parts of the Site.

3 TECHNICAL ARBORICULTURAL DETAILS

Landscape details

Distribution

- 3.1 Trees and other forms of vegetation are distributed throughout the Site (as shown on the plans at Appendix A), and these are shown to typically border 'clear' areas either in use within the golf course or for agricultural purposes.
- 3.2 There is a particularly high density of trees along the eastern edge of the Site, in addition to around the edge of the 18no. holes within the golf course (which includes where the golf course abuts the rear gardens of residential properties - see Figure 2 & Figure 5).
- 3.3 By comparison, the hedgerows around the agricultural fields contain scattered trees that populate the area to a lower density (see Figure 6); though, some of these areas are bordered at the peripheries of the Site by woodlands and belts of trees.



Figure 5: Showing part of the belt of trees within W192 that abuts the adjacent residential properties to its rear.

BS5837 details

Survey criteria

3.4 The surveyed trees and other vegetation items captured in the data from the 2019 and 2024 survey data (as referred to at paragraph 1.21) have been generally categorised, in terms of the arboricultural and landscape criteria as defined in BS5837. The criteria consider the arboricultural merits of individual trees, in addition to the wider value afforded in contributing to the character of the landscape.

BS5837 categorisation (2019 data)

3.5 In BS5837 terms, the surveyed trees and other forms of vegetation (including tree groups where constituent tree numbers are understood to have been estimated during the tree survey undertaken in the 2019 Report) comprise:

- *Category A* (i.e., high-quality): 65no. individual trees, 26no. tree groups, and 26no. woodlands;
- *Category B* (i.e., moderate-quality): 150no. individual trees, 76no. tree groups, 1no. hedgerow, & 40no. woodlands;
- *Category C* (i.e., low-quality): 66no. individual trees, 63no. tree groups, 48no. hedgerows, & 26no. woodlands; and
- *Category U* (i.e., poor-quality): 19no. individual trees & 3no. tree groups.

3.6 For clarity, this amounts to a total of 300no. individual trees and 168no. tree groups comprising numerous individual trees in each tree group as shown in the schedule at Appendix B. Further to the individual trees and tree groups, there are 49no. hedgerows, and 92no. woodlands. Notably, among the individual trees 3no. of individual trees were suggested to be veteran trees (i.e., T326, T365, & T376 (the latter tree being off-Site)) in the 2019 Report.

3.7 Following the 2019 Report, the subsequent 2021 Assessment identified that T326 did not qualify as a veteran tree, but confirmed that T365 was a veteran tree. A further 3no. veteran trees were identified (i.e., T368, T394 & T449). Also, the 2021 Assessment states that the off-Site T376 qualifies as an ancient tree instead of a veteran tree. Therefore, there are considered to be 4 no. veteran trees (i.e., T365, T368, T394, T449) and 1 no. off-Site ancient tree (i.e., T376).

3.8 The 2021 Assessment is a detailed and comprehensive evaluation of veteran and ancient trees. Consequently, the conclusions drawn from this 2021 Assessment are considered to supersede the conclusions made in the 2019 Report.

3.9 No additional veteran or ancient trees were identified during the localised 2024 survey by the Author within the Rusper Road area.



Figure 6: Showing some of the scattered oak trees (specifically in this case T60-T62) that separate agricultural fields.

BS5837 categorisation (2024 data)

3.10 In BS5837 terms, the surveyed trees and other forms of vegetation with the area that was surveyed by the Author in January 2024 comprise:

- *Category A* (i.e., high-quality): 9no. trees;
- *Category B* (i.e., moderate-quality): 174no. trees;
- *Category C* (i.e., low-quality): 18no. trees; and
- *Category U* (i.e., poor-quality): 1no. tree.

3.11 In total, this brings the total number of individually recorded trees to 502no. within the Site (i.e., a 202no. uplift from the 2019 data), which includes the plotting of trees previously recorded as groups and woodlands. All other counts detailed from paragraph 3.5 remain the same.

Root Protection Areas (RPAs)

3.12 The arboricultural data upon which this Report relies does not include any amendments to the standardised circular RPAs. During future area-specific surveys to support RMAs, it may be the case that altered RPAs are appropriate - for example, where trees abut watercourses. Therefore, detailed RPA information will need to be submitted during the future RMAs.

Statutory protections

Conservation Areas

3.13 The LPA publishes details of its Conservation Areas ('CAs') online. According to this information, the Site itself (i.e., the red line boundary extent) is not within a CA.

3.14 It is recognised that the Ifield Village Conservation Area borders portions of the north-eastern boundary of the Site and a number of off-Site trees and tree groups are located within this CA, and they do not encroach into the Site. However, in some cases tree groups along the banks of the River Mole appear to straddle the red line boundary.

Tree Preservation Orders

3.15 The LPA publishes details of its Tree Preservation Orders ('TPOs') online. According to this information, no TPOs affect any of the surveyed trees within the Site, though a TPO does relate to a group of unsurveyed off-Site trees along Whitehall Drive (that appear not to encroach into the boundary area of the Site) - specifically, TPO/0046 (comprising G1 that includes 9no. oaks, 2no. chestnuts, 1no. yew, & 10. firs). The relevant provisions of The Town and Country Planning (Tree Preservation) (England) Regulations 2012 therefore apply to these off-Site trees.

Ancient woodlands

3.16 A search of the Natural England database (i.e. MAGIC) indicates that there are ancient woodlands that abut the Site to the north-west, west, south-east and south-west (see Figure 7).

3.17 These designations affect the following recorded woodlands areas, which have been plotted as fringes of what are in fact much larger woodland areas recorded in the 2019 Report: W198, W208, W210, W333, W407, and W556.

3.18 Consequently, for future RMAs that affect these areas, updated arboricultural data will be required to ensure that buffer zones are accurately represented and that they are appropriately considered in the context of future detailed design work.

3.19 For the hybrid application, appropriate buffer zones for areas of ancient woodland have been considered and implemented within the design of the Proposed Development, as shown in Parameter Plan 1: Landscape and Public Realm (WOI-HPA-PLAN-PP01-01). The buffers to development plots are between 30m 35m from areas of ancient woodland. This is in excess of guidance which recommends a buffer zone of 15m.

3.20 Given this, it is considered that there is sufficient capacity on Site for the Proposed Development to address the relevant constraints that ancient woodlands pose on the development design during subsequent RMAs. This may include features such as drainage and sustainable drainage systems (SuDs), in addition to public footpaths and other landscaping features being located within the overall 30m 35m ancient woodland buffer area, however no such features will be located within 15m of an ancient woodland, whilst also ensuring that the main built elements are kept outside of the overall buffer zones as indicated in Parameter Plan 1.

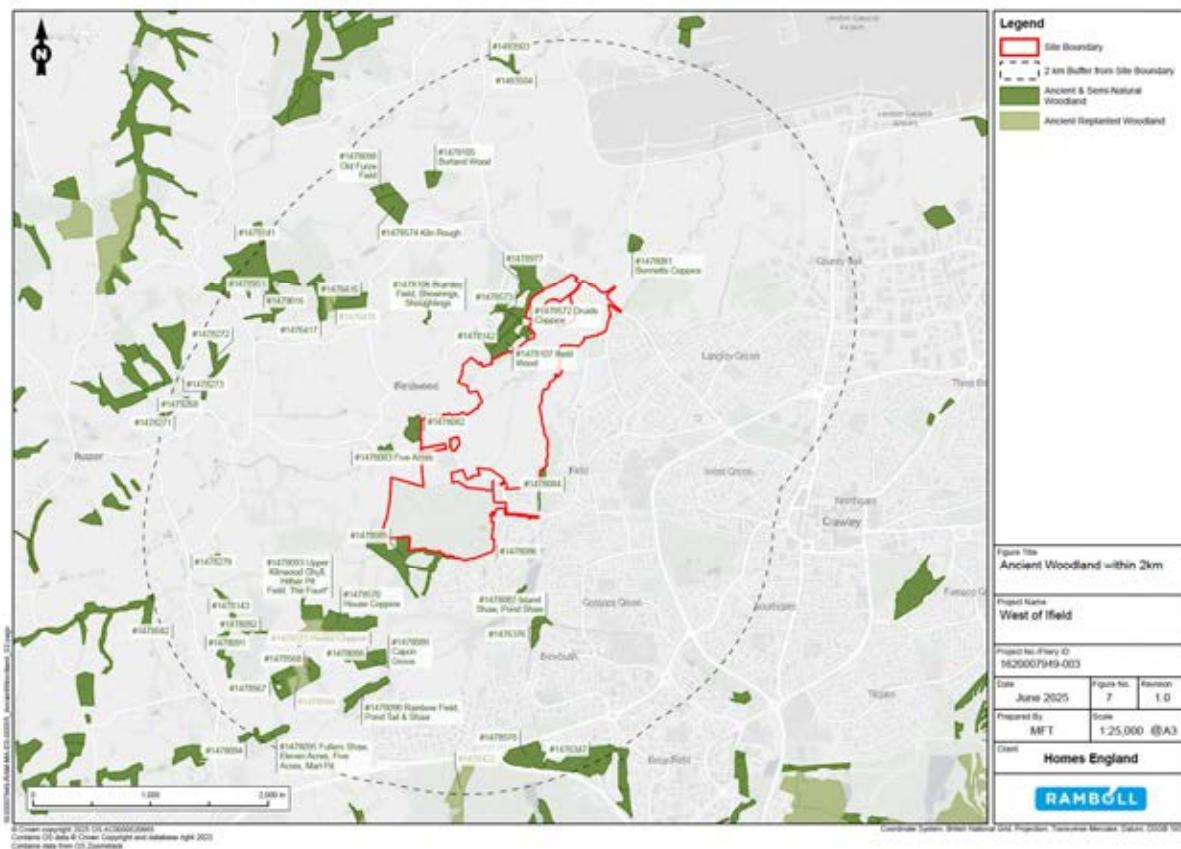


Figure 7: Showing the surrounding areas of ancient and semi-natural woodlands.

T395 (poplar DNA analysis)

3.21 The findings of the 2019 Report suggested that T395 at the north-eastern end of the Site may have potentially been a native black poplar; and as native black poplars are considered rare this warranted further investigation to substantiate whether this tree was indeed a native black poplar. A live sample was sent to Forest Research during

May 2023 and it was subsequently confirmed that the poplar is in fact a hybrid black poplar (i.e., it is not a native black poplar) - specifically, it is suspected that it is a commercial variety produced by tree nurseries. For this reason, this tree is considered not to require any different degree of consideration.

4 PLANNING POLICY AND GUIDANCE

National

Background information

4.1 Planning policy at national level is set out in the government's National Planning Policy Framework ('the NPPF')², which was recently revised in December 2024, with a further minor revision in February 2025.

4.2 At this level, policy addresses the key principles of development. At its core, there is a presumption in favour of sustainable development incorporating good and durable design, by combining economic, social, and environmental strands in a balanced manner. Trees comprise an element of green infrastructure, which is one aspect of the environmental strand of sustainability.

National Planning Policy Framework (NPPF) 2025

4.3 In the context of the Proposed Development, the NPPF provides the following guidance that is relevant in terms of the surveyed trees:

- **Paragraph 136** - "*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. Applicants and local planning authorities should work with highways officers and tree officers to ensure that the right trees are planted in the right places, and solutions are found that are compatible with highways standards and the needs of different users.*"
- **Paragraph 187** - "*Planning policies and decisions should contribute to and enhance the natural and local environment by: ... b) 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 ... trees and woodland*".
- **Paragraph 193** - "*When determining planning applications, local planning authorities should apply the following principles: c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists*".

Veteran trees & ancient woodlands

4.4 Planning Practice Guidance (PPG) on the Natural Environment, specifically paragraphs 32 to 34, provides guidance on the identification, protection and where necessary compensation for the loss or deterioration of ancient woodland and ancient or veteran trees. In addition, standing advice issued by Natural England and the Forestry Commission, available via the UK Government website, offers further guidance on managing ancient woodland and veteran trees in the context of development. This standing advice is a material consideration in planning decisions

4.5 Overarchingly, reinforces the requirement to protect ancient and veteran trees in accordance with Policy 193 of the NPPF (2024) and outlines a hierarchy of mitigation measures, including compensation where appropriate. Most notably, it recommends a minimum buffer zone of 15 metres from the boundary of an ancient woodland, or an RPA equivalent to 15-times the recorded stem diameter for a veteran or ancient tree.

4.6 As individual plots within the Site are brought forward through RMAs, it will be necessary for the details of these RMAs to appropriately consider the presence and constraints of veteran and ancient trees and ancient woodland. Therefore, area-specific tree surveys will be required as part of the detailed design process for each phase of the development (each RMA).

Local

Background information

4.7 Planning policy at the local level is currently set out in the LPA's Horsham District Planning Framework (the 'LDP'), published in 2015.

Horsham District Planning Framework 2015

4.8 In the context of the Proposed Development, the LDP provides the following guidance that is relevant in terms of the surveyed trees:

- **Policy 26: Countryside Protection** - "*Development will be considered acceptable where it does not lead, either individually or cumulatively, to a significant increase in the overall level of activity in the countryside, and protects, and/or conserves, and/or enhances, the key features and characteristics of the landscape character area in which it is located, including; ... 2. The pattern of woodlands, fields, hedgerows, trees, waterbodies and other features*".
- **Policy 31: Green Infrastructure and Biodiversity** - "*1. Development will be supported where it can demonstrate that it maintains or enhances the existing*

network of green infrastructure. Proposals that would result in the loss of existing green infrastructure will be resisted unless it can be demonstrated that new opportunities will be provided that mitigates or compensates for this loss, and ensures that the ecosystem services of the area are retained. ... 4. a) Particular consideration will be given to the hierarchy of sites and habitats in the district as follows: ... iii. ... any areas of Ancient woodland".

- **Policy 33: Development Principles** - "*In order to conserve and enhance the natural and built environment developments shall be required to: ... 6. Presume in favour of the retention of existing important landscape and natural features, for example trees, hedges, banks and watercourses. Development must relate sympathetically to the local landscape and justify and mitigate against any losses that may occur through the development".*

5 ARBORICULTURAL IMPACT ASSESSMENT

Removals

Precursory information

5.1 The tree removals that are specified within this Report are based on the position of the main vehicular highway elements (that this Report terms 'core infrastructure'), which includes the Crawley Western Multi-Modal Corridor (CWMMC) and the Primary Roads as shown on Parameter Plan 2: Movement and Access (WOI-HPA-PLAN-PP02-01).

5.2 The core infrastructure elements are prepared to a detailed level and it is considered that the specified removals are reflective of what removals will be required, on the basis that this Report is read in conjunction with Parameter Plan 6: Planning Application Tree Removal Plan (WOI-APP-PP06).

5.3 Parameter Plan 6 has been prepared based of the data from the 2019 Report and 2021 Assessment, and also the 2024 data that was gathered by TMA for a small portion of the Site. This separates the data into 3no. categories, which are:

- individual trees and tree groups that are to be removed (that are highlighted in red on Parameter Plan 6: Planning Application Tree Removal Plan);
- individual trees and tree groups that are to be retained to the greatest possible extent (that are highlighted in yellow on Parameter Plan 6: Planning Application Tree Removal Plan); and
- individual trees and tree groups that are committed to be retained (that are highlighted in green on Parameter Plan 6: Planning Application Tree Removal Plan).

5.4 For arboriculture, the Design Code outlines the following commitments:

- Natural and Sem-Natural Green Spaces existing trees must be retained;
- Amenity Open Spaces Retain all good quality woodland, trees and hedgerows within amenity greenspaces as set out in the tree protection plan (Parameter Plan 6); and
- Existing Features - Every effort must be made to protect and retain existing valuable trees and hedgerows in line with BS5837. Where tree removal is unavoidable it must be undertaken on a phased basis removing only those required for the relevant phase coming forward.

5.5 The Design Code also defines the following buffers:

- Ifield Brook Meadows 25m;
- Hyde Hill Local Wildlife Site 30m; and
- Areas of adjacent Ancient Woodland – minimum of 30m, increased to 35m for Hyde Hill Ancient Woodland.

Numerical data

5.6 Parameter Plan 6: Planning Application Tree Removal Plan (WOI-APP-PP06) sets out where trees are to be removed, where they are to be retained, and where as many trees as possible within particular areas would be retained.

5.7 This Report has assessed proposed impacts of the Proposed Development on a worst-case-scenario basis, as such the assessment has assumed that only those trees highlighted on Parameter Plan 6 are retained (i.e., highlighted in green) and that all other trees will be lost.

5.8 As mentioned above, final tree retention details will need to be prepared as part of future RMAs.

5.9 However, operating on a worst-case-scenario basis (as strictly required given the parameter basis of the Proposed Development, albeit this is a highly unrealistic scenario given the commitments in the Design Code), it is to be assumed that only those trees highlighted on Parameter Plan 6 as being definitively retained (i.e., highlighted in green) will be retained all other trees either will or could be removed. In turn, final tree retention details will need to be prepared as part of future RMAs.

5.10 The numerical breakdown of worst-case-scenario losses are as follows (and are represented in tabular format at Appendix C that highlights where tree group, woodland, and hedgerow losses are only partial):

- 71no. individual trees (BS5837 categories: 7A, 45B, 19C, 0U - this includes the veteran tree T368);
- 43no. tree groups (BS5837 categories: 4A, 16B, 23C, 0U);
- 30no. woodland areas (BS5837 categories: 3A, 14B, 13C, 0U), and
- 17no. hedgerows (BS5837 categories: 0A, 0B, 17C, 0U).

5.11 Specifically with regard to the Phase 1 component of the Proposed Development only, the affected items are highlighted in red on the same table at Appendix C. Of the aforementioned counts in the above paragraph, this comprises:

- 47no. individual trees (BS5837 categories: 4A, 33B, 10C, 0U - this includes the veteran tree T368);
- 19no. tree groups (BS5837 categories: 1A, 9B, 9C, 0U);
- 11no. woodland areas (BS5837 categories: 0A, 8B, 3C, 0U), and
- 5no. hedgerows (BS5837 categories: 0A, 0B, 5C, 0U).

Mitigation greening

Phase 1 (detailed)

5.12 With regard to Phase 1 of the Proposed Development, matters relating to new tree planting are provided within the Phase 1A Landscape Typologies Plan and Phase 1B Landscape Typologies Plan. This includes the planting of new street trees along both sides of the proposed core infrastructure elements. A schedule of the proposed tree species palette is provided on these plans, although a breakdown of the count for each tree species is not provided; however, this degree of detail will be secured by way of a planning condition.

5.13 A manual count of these aforementioned plans indicates that a minimum of 189no. trees are proposed to be planted at relatively even internals along the primary vehicular highways, which is considered to be a positive aspect of the Proposed Development as it will serve to ensure that the main route through the Site is verdant in character.

Outline component

5.14 Details with regards to new forms of greening across the Site as part of the Proposed Development are at an early stage (as is demonstrated on Parameter Plan 1: Landscape and Public Realm (WOI-HPA-PLAN-PP01-01) and the Site Wide Design Code (WOI-HPA-DOC-SWDS-01)). However, it is considered that there will be capacity to ramify retained areas of existing green space in addition to designing the development plots in a manner that allows for an appropriate level of tree planting within (e.g., street trees).

5.15 It will need to be the case that such details are included as part of future RMAs, as the positioning of new trees is directly associated within the development of spatial designs. Subject to good designs (that includes tree species selections based on various factors including climate resilience), it is considered that new trees can be planted to an extent that is acceptable in policy terms.

5.16 It is outside the scope of this report to cover proposed tree planting, this will be addressed in an appropriate Habitat Management and Maintenance Plan (HMMP) and specific landscaping proposals to be prepared for each phase of the Proposed Development (to be secured by way of a planning condition). The HMMP and landscaping proposals will consider tree species with specific reference to resilience to climate change (i.e. tolerance to drought and prolonged periods of rainfall).

Pruning

5.17 No tree pruning is considered necessary for the Phase 1 or for the Outline component of this hybrid application.

5.18 However, it is very likely that tree pruning will be required throughout the Site for various reasons, which will be addressed within detailed arboricultural documentation submitted as part of future RMAs (and in the case of the Phase 1 development as part of any details secured by way of a planning condition).

Impact on veteran trees & ancient woodland

5.19 The impact of the Proposed Development on veteran and ancient trees (i.e., T365, T368, T376, T394, & T449) and ancient woodlands (i.e., W198, W208, W210, W333, W407, and W556) has been assessed. The assessment has been undertaken based on the available details for each individual receptor (noting that appropriate protection will likely comprise the use of barrier, stem, and/or ground protection).

5.20 For the Phase 1 component a (D) has been used to identify the relevant trees, with all other trees falling within areas of the Site subject to outline consent only:

- T365 (D) likely to be a low impact, subject to appropriate protection during works to construct the CWMMC;
- T368 (D) - to be removed to facilitate works to construct the CWMMC (due to its very close proximity to the CWMMC wherein much of its RPA will likely be affected via excavations and associated activities);
- T376 (D) likely to be a low impact, subject to appropriate protection during works to construct the CWMMC;
- T394 (D) - likely to be a low impact, subject to appropriate protection during works to construct the CWMMC;
- T449 (D) - likely to be a low impact, subject to appropriate protection during works to construct the CWMMC;

- W198 - likely to be a low impact, subject to appropriate spatial designs for residential plot HW7, shown on Parameter Plan 3: Land Use;
- W208 - likely to be a low impact, subject to appropriate spatial designs for residential plot HW7, shown on Parameter Plan 3: Land Use;
- W210 – likely to be a low impact, subject to appropriate spatial designs for residential plot HW7, shown on Parameter Plan 3: Land Use;
- W333 (D) - likely to be a low impact, subject to appropriate protection during works to construct the CWMMC;
- W407 (D) - likely to be a low impact, subject to appropriate protection during works to construct the CWMMC; and
- W556 - likely to be a low impact, subject to appropriate spatial designs for residential plot M8, shown on Parameter Plan 3: Land Use.

5.21 The majority of the veteran trees and areas of ancient woodlands are not anticipated to experience significant harm as a result of the Proposed Development. However, the removal of veteran tree T368 will be required. In accordance with paragraph 193 of the NPPF, the loss of a veteran tree is only permissible under 'wholly exceptional' circumstances. While these circumstances are not detailed in this Report, they are addressed in detail in the Planning Statement which supports the hybrid planning application. The Design and Access Statement explains the evolution for the design of the Proposed Development, highlighting efforts to retain veteran trees wherever feasible and explaining the rationale behind the unavoidable loss of T368. The proposed compensation measures for the loss of this veteran tree are set out in the Phase 1 Detailed Proposals Design and Access Statement (DAS), prepared by Arcadis.

5.22 The remaining veteran trees (T365, T394 and T499) will not be impacted by the Proposed Development (either the Phase 1 or outline components), as their crowns and RPAs are located beyond any areas of the Site that are foreseeably subject to development activities.

5.23 The off-Site ancient tree T376 is relatively close to the CWMMC location, although it is considered that subject to suitable mitigation T376 can be protected. Therefore, mitigation for T376 will be further reviewed as part of further mitigation details to be prepared, to be secured by way of a planning condition (as it falls within an area subject to Phase 1), to ensure that designs are appropriate to ensure its practical protection.

Delivery of core infrastructure (Detailed & Outline components)

CWWMC & primary vehicular highways (Phase 1)

- 5.24 The location of the CWMMC and primary vehicular highways through the Site are identified, within Parameter Plan 2: Movement and Access (WOI-HPA-PLAN-PP02-01)
- 5.25 Based on the tree removals that this Report (and Parameter Plan 6: Planning Application Tree Removal Plan) indicates are likely to be required, the residual risk of harm to retained adjacent trees and other forms of vegetation is considered to be of low impact (i.e., the affected trees are likely not to decline in terms of their BS5837 category and anticipated longevity as a consequence of works). However, there are some areas where the RPAs of trees may be affected by highway construction works.
- 5.26 For this reason, any future submitted details should be accompanied by an AMS to facilitate practical implementation (i.e., to be secured as part of a suitable planning condition). The future application will also need to be accompanied by an updated tree survey for the area affected by these works, which provides an update baseline (appropriate for each phase of the Proposed Development) in accordance with which the AMS will be prepared.

Pedestrian & cycle routes (Outline component)

- 5.27 The details of pedestrian and cycle routes across the Site are identified within Parameter Plan 2: Movement and Access (WOI-HPA-PLAN-PP02-01) However, these are not considered to be of a level of detail that enables for a specific schedule of tree losses or tree impacts. It should be assumed probable that some localised removal and/or pruning will be required to construct these routes, which is in keeping with the removals shown within Parameter Plan 6: Planning Application Tree Removal Plan (WOI-APP-PP06).
- 5.28 Future RMAs will need to include specific details of tree removals, footpath and cycle route positions, and design specifications, noting that this can be achieved through the provision of an AIA to demonstrate effects and subsequently an AMS to facilitate practical implementation.

5.29 With regard to the impact to trees and other forms of vegetation in constructing these types of structures (pedestrian and cycle routes), it is considered that retention of trees and hedgerows will be largely feasible, ensuring only localised removals where it is strictly required. Fundamentally, this is because these structures are formed on a shallow sub-base and accommodate only light traffic (i.e., pedestrians and cyclists). As such, it is common practice for bespoke design solutions to be used in RPAs, which for example can include the use of CellwebTRP. Furthermore, footpaths and cycle routes can often meander around trees, where it is appropriate to do so.

5.30 Consequently, it is considered that the impact of constructing proposed pedestrian and cycle routes as part of the Proposed Development on trees and other types of vegetation is of low impact (i.e., the affected retained trees are likely not to decline in terms of their BS5837 category and anticipated longevity as a consequence of works, and removed trees will not obviously detract from the character of the local landscape), both as regards to losses and to harm to retained elements (on the basis that the majority of trees and vegetation within the affected areas ought to be able to be retained).

Delivery of Character Areas (Outline component)

5.31 The Proposed Development does not include details of the proposed general arrangements of the individual development plots that form part of the Outline component. Therefore, all details relating to arboricultural impacts must be addressed as part of future RMAs, following input into the detailed design process by an arboriculturist (associated with architectural, landscape, and engineering (including drainage and utilities) aspects at a minimum) - this would include an appropriate analysis of daylight and shading issues associated with trees (where appropriate).

Delivery of public open spaces (Outline component)

5.32 Parameter Plan 1: Landscape and Public Realm (WOI-HPA-PLAN-PP01-01) indicates that many green areas and open spaces would be created throughout the Site, separating the 'Principle Building Zone' in the southern area of the Site and forming a large open space in the northern area.

5.33 Creation of public open spaces on Site as a result of the Proposed Development is considered to have a low impact on existing trees and other forms of vegetation within these areas, as landscaping would be relatively minimal in terms of the extent of intervention (as included in the Design Code). Nonetheless, it would be necessary for relevant details to be brought forward within the appropriate RMAs, wherein they are accompanied by an AIA to demonstrate effects (based on precise setting-out details

and arboricultural data), and subsequently an AMS to facilitate practical implementation.

Planning policy considerations

National policies

5.34 With regard to the relevant national planning policies, as described in Section 4, the Proposed Development is considered to respond to the following policies:

- **Paragraph 136** - The Proposed Development includes the retention of existing trees and other forms of vegetation as indicated on Parameter Plan 6: Planning Application Tree Removal Plan with retention in areas where it is possible to do so and otherwise planting new trees for long-term future benefits. The Design Code provides further details about the principles of tree retention, which would be implemented through the Site as part of the Proposed Development.
- **Paragraph 187** - The comments as per Paragraph 136 above apply in full.
- **Paragraph 193** - The Proposed Development is considered not to significantly impact or harm the identified veteran trees and ancient woodlands that are located within and adjacent to the Site (i.e., they are likely to be subject only to a low impact at most), with the exception of veteran tree T368 that will require removal to facilitate the construction of the CWMMC (where the wholly exceptional circumstances for the loss of this single veteran tree is considered to be an important factor - this is discussed in more detail in the Planning Statement that supports the hybrid planning application). The Design and Access Statement explains the evolution for the design of the Proposed Development and outlines how wherever feasible veteran trees were retained and the reasons for the unavoidable loss of T368. Compensation for the loss of this veteran tree is detailed in the Environmental Statement Biodiversity chapter. Details will need to be developed in a manner that appropriately considers veteran and ancient trees (except T368), to ensure that there is no further undermining of this current position as regards to compliance with this element of the NPPF. Currently, suitable buffer zones from the edges of ancient woodlands are included as part of the Parameter Plans.

Local policies

5.35 With regard to the relevant local planning policies, the Proposed Development is considered to respond to these policies in the following manners:

- **Policy 26** - The Proposed Development is considered to have the capacity to protect the pattern of woodlands, fields, hedgerows, and trees that are distributed across the Site, though there will be some losses as a result of Phase 1 (specifically from the development of the CWMMC). Furthermore, as future RMAs are brought forward, the spatial design of the Principal Building Zone' would need to be developed to ensure that the qualities of the Site are appropriately retained (with new tree planting taking place where it is necessary to do so as a form of direct mitigation for loss).
- **Policy 31** - The Proposed Development may result in the loss of some existing green infrastructure elements, however, there is considered to be sufficient capacity for new tree planting and other forms of landscaping that should appropriately mitigate for any such losses. Furthermore, it is considered likely that ancient woodland elements will not be subject to any significant risk of harm (i.e., they are likely to be subject to a low impact at most), although this will need to be addressed within the relevant RMAs.
- **Policy 33** - Comments as per Policy 26 apply in full with no additional comments as regards to this policy exclusively.

6 CONCLUSIONS

6.1 This Report has assessed the potential arboricultural impacts of the Proposed Development on a worst-case scenario basis. Therefore, it has been assumed that only those trees highlighted as to be retained' on Parameter Plan 6: Planning Application Tree Removal Plan would definitely be retained, and all other trees could potentially be removed. However, this approach reflects the strict requirements of a parameter-based assessment, albeit this is a highly unrealistic scenario given the commitments in the Design Code. Final tree retention details will be confirmed through future RMAs, and wherever feasible layouts will be designed to take account of existing trees.

6.2 In the worst case scenario, the Proposed Development could result in the removal of 71no. individual trees (BS5837 categories: 7A, 45B, 19C, 0U - this includes one veteran tree T368), 43no. tree groups (BS5837 categories: 4A, 16B, 23C, 0U), 30no. woodland areas (BS5837 categories: 3A, 14B, 13C, 0U), and 17no. hedgerows (BS5837 categories: 0A, 0B, 17C, 0U).

6.3 Future RMAs and submission in response to planning conditions (for Phase 1 of the Proposed Development) will need to be developed using updated arboricultural baseline data. The current survey data is considered to be sufficient for the context of the current hybrid planning application.

6.4 It is anticipated that the majority of the veteran trees and ancient woodlands will not be significantly affected, except for veteran tree T368 which is proposed to be removed. In line with paragraph 193 of the NPPF, the loss of a veteran tree requires 'wholly exceptional' circumstances. These circumstances are not detailed in this Report, they are addressed in the Planning Statement which supports the hybrid planning application. The Design and Access Statement explains the evolution for the design of the Proposed Development and demonstrates the efforts to retain veteran trees wherever possible, as well as the justification for the unavoidable loss of T368. Compensation measures for the loss of this veteran tree are detailed in the Arcadis Phase 1 Ecological Mitigation Strategy.

6.5 The hybrid planning application proposes a phased development capable of coming forward in distinct and severable phases and/or plots Arboricultural impacts would increase incrementally as each phase is delivered, but will not exceed those identified in this assessment. Providing mitigation measures proposed in this report are implemented (to be secured by appropriate planning condition or detailed within future reserved matters applications) then development of any individual phase will not alter the overall arboricultural impact, as mitigation is designed to be phase-specific and not

reliant on measures from other phases. For the outline component of the Proposed Development, relevant mitigation details will be brought forward within the appropriate phase-specific RMAs, wherein they are accompanied by an AIA to demonstrate effects (based on precise setting-out details and arboricultural data), and subsequently an AMS to facilitate practical implementation. For the detailed component of the Proposed Development, an AMS will be prepared (to be secured by an applicable planning condition). The mitigation detailed in these documents will include the following where applicable (not an exhaustive list):

- necessary tree (ground and barrier) protection and no-dig areas which consider all elements of the Proposed Development, including installation of underground utilities;
- consideration of effects from potential Site level changes;
- measures for any pruning works;
- temporary construction effects, such as temporary access / construction routing and placement of construction infrastructure (i.e. cabins etc);
- construction methods, including required input from a qualified arboriculturist, outlining necessary pre-start meetings and inspections; and
- for the outline component phase-specific AIAs, where the built development could potentially overshadow existing trees, considered unlikely given the low-rise nature of the Proposed Development, however it will be considered).

6.6 Subject to appropriate design developments and the use of appropriate planning conditions imposed by the LPA, the Site can be developed in a manner that appropriately considers trees and other forms of vegetation (including veteran and ancient trees, ancient woodlands, and all other trees and hedgerows –), ensuring full compliance with relevant planning policies and government guidance, particularly noting the wholly exceptional circumstances for the removal of the veteran tree T368.

7 APPENDICES CONTENTS

APPENDIX A - Plans

- 230265-P-10.01c Tree Survey

APPENDIX B - Schedules

- Arcadis Tree Schedule
- NJC Ltd Tree Schedule & Information
- TMA Tree Schedule

APPENDIX C - Removals table

- Tree removals table

APPENDIX A - Plans

- 230265-P-10.01c Tree Survey

