ARBORICULTURAL IMPACT ASSESSMENT

Land at Partridge Green

October 2024

Barton Hyett Associates
Arboricultural Consultants

Summary table		
Site Name:	Land at Partridge Green	
Project reference:	4621	
Site Address:	Lock Lane, West Grinstead, Horsham, West Sussex	
Nearest Postcode:	RH13 8EF	
Central Grid reference:	TQ 18749 18703	
Local Planning Authority:	Horsham District Council	
Relevant planning policies:	Horsham District Planning Framework - November 2015: Policy SD6 Landscape Buffer, Landscape Character, Biodiversity and Green Infrastructure Policy 25 Strategic Policy:The Natural Environment and Landscape Character Policy 26 Strategic Policy: Countryside Protection Policy 31 Green Infrastructure and Biodiversity Policy 33 Development Principles	
Statutory Controls:	**Tree Preservation Order**	**Conservation Area**
	No (online check made 02/10/2024)	No
Soil Type: (Source: BGS online soils map © NERC 2024)	**Superficial/Drift**	**Bedrock**
	None recorded	Weald Clay Formation - Mudstone
Proposed site plan:	7034 - PL-02P2- Site Layout - Sept 2024	
Report author:	Richard Hyett *MSc, BSc (Hons), MICFor, MArborA*	
Date of issue:	03/10/2024	

Arboricultural Association Professional Member

PR3525

Institute of Chartered Foresters registered

REPORT CONTENTS:

1. INTRODUCTION

1.1. I am Richard Hyett, an arboriculturist with 20 years experience in the industry, a professional member of the Arboricultural Association and a Chartered Arboriculturist.

1.2. Barton Hyett Associates Ltd have been instructed by Croudace Homes Limited to survey trees located on land to the west of the B2135 (Bines Road), Partridge Green ('the site') in accordance with the recommendations of British Standard 5837:2012 '*Trees in relation to design, demolition and construction - recommendations*'.

1.3. The scope of the instruction was to inspect trees relevant to a planning application for residential development at the site and provide written advice on how they inform feasibility and design options for the proposed development. The instruction also required an assessment of the potential impact (the Arboricultural Impact Assessment) of the proposed development on the site's arboricultural resource to be undertaken.

2. SITE DESCRIPTION

2.1. The site is located on the south-western edge of the village of Partridge Green. The approximate survey area (not extent of site) is shown in Figure 1 below.

2.2. The site is formed by part of a large irregular shaped arable field and extends to circa 5.7ha in size.

Figure 1: aerial image (Google Maps) of the site with the approximate survey area shown in yellow.

[1] Lonsdale, D. (ed.) (2013). Ancient and other veteran trees: further guidance on management. London: The Tree Council

[2] Read, H. 2000. Veteran Trees: A guide to good management. London: English Nature.

2.3. The site is broadly flat with little variation in level and only slight undulations in the ground surface.

2.4. A small group of residential dwellings are located just beyond the south-eastern corner of the site.

2.5. West of the site is further part of the agricultural field within which the proposed development sits with a complex of farm buildings beyond. North of the site are a number of larger dwellings that sit within substantial plots.

2.6. South of the site is a further agricultural field with a number of residential dwellings beyond. To the east of the site, and beyond Bines Road, is a relatively large industrial estate (Star Road Trading Estate).

3. TREE SURVEY FINDINGS

3.1. An initial survey was undertaken in 2021 with a further survey update undertaken in 2024. The survey recorded 72 arboricultural features. These are summarised in terms of quality in accordance with the recommendations of BS 5837:2012 in Table 1 below and shown in more detail on the Tree Survey and Constraints Plan (**Section 2**) and within the Tree Survey Schedule (**Section 4**).

Table 1: Summary of Arboricultural Features of Each BS5837 Quality Category

	Total	A - High quality trees whose retention is most desirable.	B - Moderate quality trees whose retention is desirable.	C - Low quality trees which could be retained but should not significantly constrain the proposal.	U - Very poor quality trees that should be removed unless they have high conservation value.
Trees	**41**	18	17	6	0
Groups	**16**	1	8	7	-
Hedgerows	**15**	-	1	14	-
Total	**72**	**19**	**28**	**27**	**0**

4. KEY ARBORICULTURAL FEATURES

4.1. The site itself contains numerous mature trees either on the site boundary or within the northernmost field. The most significant trees are located in the northern field. These trees are all English oak. Of the individual trees surveyed, five were identified as veteran trees (T3, T20, T21, T23, T25) with a further three trees within G10 also considered to be veterans. These trees have been identified as veterans by virtue of their large stem girths (as per Fig. 1.3 in Lonsdale, 2013[1]). They have also been assessed as being veteran trees using the characteristic features found on veteran trees (in para. 2.1.1 in Read, 2000 [2]). These features include

retrenching crowns, deadwood, fungal fruiting bodies, epiphytes etc. All veteran trees with the exception the offsite ash tree (T3) were also assigned to quality category A (high-quality).

4.2. No woodland was identified on site. A search of Natural England's Ancient Woodland Inventory within DEFRA's online mapping resource (MAGIC) has revealed that there are no areas of Ancient Woodland adjacent to the site. The nearest Ancient Semi Natural Woodland (ASNW) is located at Ash Wood which is approximately 400m to the east of the site.

4.3. In addition to the veteran trees, a number of high-quality (Category A) oak trees were also identified. These are, amongst others, T22, T24 and T27. In addition, numerous moderate-quality (Category B) oak trees were also identified. It will be necessary to keep the RPAs of the high and moderate quality trees free from any development.

4.4. A mature oak tree (T15) was categorised as low-quality (Category C) due to its poor physiological condition and past management works resulting from pruning to provide clearance to overhead power lines. Whilst this tree is not the best specimen, it does provide habitat value.

4.5. A search undertaken with the Local Planning Authority has revealed there are no Tree Preservation Orders (TPO's) protecting trees that are associated to the site. The site is not located within a Conservation Area.

5. PROPOSED DEVELOPMENT

5.1. The description of the proposed development is as follows:

'Full planning permission for the erection of 101 residential dwellings including 45% affordable housing, creation of a new access and cycle path, and provision of public open space, associated landscaping and replacement allotment'

5.2. The proposed site layout is shown on the proposed site plan (drawing ref:*7034 - PL-02P2- Site Layout* - as amended and submitted).

6. IMPACT ASSESSMENT

6.1. The impact assessment considers the effects of any tree loss required to implement the proposed development as well as any reasonably foreseeable, potentially damaging activities proposed in the vicinity of retained trees. This is undertaken with reference to BS 5837:2012 and considering the nature of the proposed development. Actual and potential impacts can include tree removal to facilitate the development, soil compaction in close proximity to trees, and direct impact damage to the canopy and roots of retained trees from construction activities. A summary of anticipated impacts resulting from the proposed development is provided below.

Trees to be removed

6.2. No individual trees, or groups of trees, will require removal in order for the proposed development to be implemented. Only a limited amount of hedgerow removal will be required as detailed below and as shown on the Tree Retention and Removal Plan in **Section 3.**

- **H5** - Category C - 2.5m of removal for cycle path link
- **H6** - Category C - 12m of removal for primary site access
- **H13** - Category C - 7m of removal for cycle path link
- **H15** - Category B - 9m of removal for cycle path link

Total = 35.5m

6.3. Given the limited amount of hedgerow removal required, the proposed new planting as set out on the site wide landscape scheme can appropriately mitigate for the loss. In addition, a substantial amount of new tree planting within public open space and along streets can provide an overall enhancement to the arboricultural resource of the site.

Impacts on retained trees

6.4. *Demolition and site clearance* - No significant demolition or site clearance, that will impact upon retained trees, will be required in order to allow the proposed development to be implemented.

6.5. *Facilitation pruning* - No significant facilitation pruning is anticipated to be required.

6.6. *Ground level changes* - The site is relatively flat in nature and no significant ground level changes are proposed. Existing ground levels within the RPAs and buffers of retained trees must be retained.

6.7. *Foundations* - the proposed site layout demonstrates that the site can accommodate the quantum of proposed dwellings without the need for any foundations to be constructed within, or close to, the RPAs or buffers of retained trees.

6.8. *Proposed access* - The proposed site access arrangement will not require the removal of any trees (only limited hedgerow - see paragraph 6.2) and the access will be located outside the RPAs or buffers of retained trees.

6.9. *Hard surfacing* - No extensive areas of hard surfacing are required within the RPAs of retained trees. However the proposed site layout shows two location where hard surfacing installation needs to the considered in relation to retained trees. In both cases the hard surfacing relates to the proposed cycle link through the site.

6.10. The first instance is adjacent tree group G9 (moderate quality, category B, goat willow). In this case the RPA encroachment is minimal. In addition, the proposed cycle path utilises an existing field gateway that has been used by heavy farm machinery for many year. Given the situation and the species within G9 it is not proposed to use any alternative construction design (such as a 3d cellular confinement system) for the cycle path in this location. It will still however be necessary to install the path in line with an appropriate working methodology to be set out within in a detailed Arboricultural Method Statement.

6.11. The second location is to the east of T23 (category A, veteran tree). In this case the cycle path is located outside of the Root Protection Area of T23. The cycle path is located wholly within existing agricultural land

that has been ploughed and disturbed for many years (as opposed to pristine undisturbed ground). However, the cycle path is located within the applied veteran tree buffer of T23. Despite the path being located outside of the Root Protection Area of T23 a precautionary approach is being adopted to the path within the buffer. As such the path will be installed over the previously ploughed land using a 3d cellular confinement system with a permeable surface. In line with the Standing Advice this will allow some access to the buffer but without the habitat provided by the veteran tree being impacted. The relevant location is highlighted on the plan in **Section 3**. The detailed design of the cycle path road will be prepared to avoid impacts upon T23. The cycle path past T23 will need to be carefully implemented in line with a detailed AMS.

6.12. *Services* - The details of the locations of required services are not available at this stage in the planning and design process, however, the site contains extensive space out side of the RPAs and buffers of retained trees within which all services could be located without any arboricultural impacts.

6.13. *Surface water drainage* - A number of swales and attenuation basins are proposed in the north and west of the site. These are located outside of the RPAs and buffers of significant high quality (Category A) and veteran trees. However, the attenuation basin in the north west corner of the site is shown to be located within the RPAs of boundary trees T5 and T6 (both moderate quality - category B). In these locations the works to form the basins will be banking up from existing ground level rather than excavation in to existing ground. It has been confirmed with the project drainage consultant that it will be possible to 'scallop' the edges of the attenuation basins near T5 and T6 to avoid work within the RPAs of these trees without impacting the effectiveness of the basins.

Summary

6.14. The proposal is feasible from an arboricultural perspective, and if carefully implemented according to an approved arboricultural method statement there would be no or only a very low potential negative impact on the retained trees.

7. HEADS OF TERMS FOR AN ARBORICULTURAL METHOD STATEMENT (AMS)

7.1. BS 5837:2012 (Figure 1) recommends that detailed/technical design of tree protection and arboricultural methodologies should be resolved and finalised following the approval of the feasibility of a scheme by the Local Planning Authority.

7.2. Annex B and Table B.1 of BS 5837:2012, an informative, advises that Arboricultural Method Statement (AMS) Heads of Terms are a sufficient level of information in order to deliver tree-related information into the planning system. The table also advises that a detailed AMS might reasonably be required as a planning condition.

7.3. A brief summary of the principles of tree protection on development sites is included in **Section 7**.

7.4. A draft, 'Heads of Terms' for an AMS is set out below:

- Project arboriculturist – schedule of monitoring and supervision to be agreed upon with the applicant and LPA
- Pre-commencement site meeting - to be attended by the project arboriculturist, client, site manager and other relevant parties. Project arboriculturist to ensure that all parties have copies of the tree protection plan and this report.
- Tree removals - as shown on the finalised and approved Tree Retention and Removal Plan (TRR)
- Erection of tree protection barriers (and temporary ground protection - if required) as shown on the finalised and approved Tree Protection Plan (TPP)
- Site preparation and ground works - no access for any machinery within the fenced tree protection areas (Construction Exclusion Zone - CEZ).
- Main construction phase - all tree protection measures shall remain in situ and intact for the duration of the construction phase - watching brief on 'no dig' path installation within buffer of T23.
- Removal of tree protection barriers - only to occur following approval of site conditions by the project arboriculturist
- Final landscaping including tree planting

8. CONCLUSIONS AND RECOMMENDATIONS

8.1. The baseline survey information has been used to inform the development proposal through the iterative design process. This has resulted in the preparation of design proposals for the site that minimise negative arboricultural impacts.

8.2. All the high and moderate quality, individual trees can be retained and adequately protected during construction activities to sustain their health and longevity. In particular, the significant and prominent trees within the centre of the site can be retained and, where possible, enhanced through appropriate management.

8.3. In the context of the scale of the site and the nature of the proposed development, the direct arboricultural impacts are very limited. The direct impacts are related to the minimal hedgerow loss required to achieve appropriate highway access into the site as well as the proposed cycle link.

8.4. All tree losses can be mitigated through new diverse tree and hedgerow planting, particularly within the proposed public open spaces. New trees will likely have an extended useful life expectancy compared to an of the lowest quality retained trees located around the site.

8.5. On the basis that the recommendations and advice contained within this report are adhered to, and subject to appropriate implementation, the proposed development of the site is, in my opinion, acceptable from an arboricultural perspective.

Richard Hyett MSc, BSc (Hons), MArborA, MICFor
Chartered Arboriculturist

IMAGES FROM THE TREE SURVEY

PROJECT NO: 4621

TAKEN ON: 20/09/2021

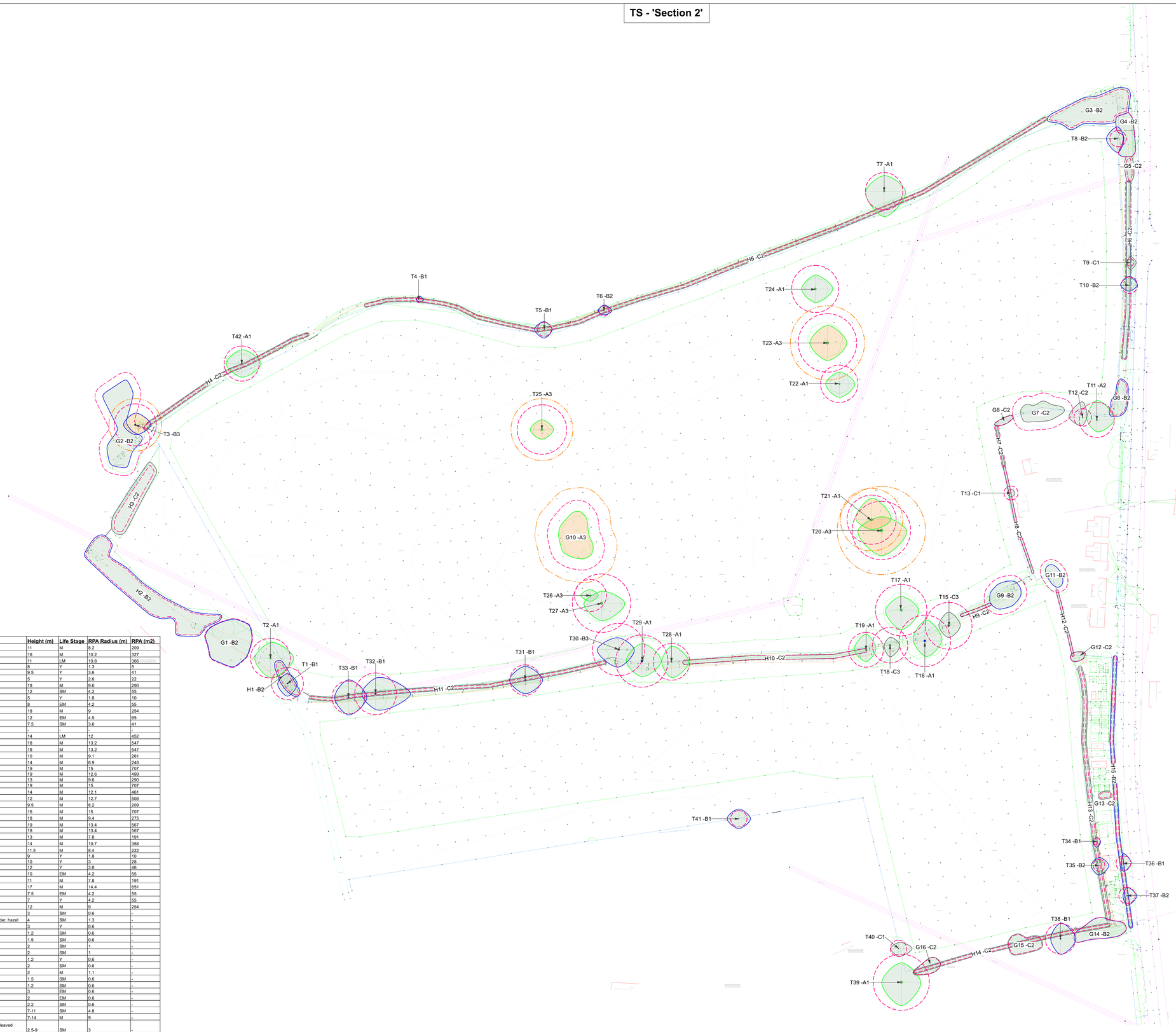
SURVEYOR: RH/LF

Barton Hyett Arboricultural Consultants

		
IMAGE 1: Looking north-east across the site from its western boundary. The group of trees to the left of frame are located offsite to the north of Lock Lane. G10, T26 and T27 can be seen to the right of centre frame.	*IMAGE 2: Looking east along H5 on the northern boundary of the site. The trees to the left of frame are looted offsite to the north fo Lock Lane. T24 and T23 can be seen to right of frame.*	*IMAGE 3: Looking south-west across the northern part of the site towards G10 and T26 through to T30. T25 can be seen to the right of frame.*
		
IMAGE 4: Looking west from the site onto the B2135.The end of H6 can be seen to the left of frame with the existing hedgerow gap vegetated brambles and nettles.	*IMAGE 5: Looking west along the north edge of H9 towards T15 to T19.*	*IMAGE 6: Looking west across the northern part of the site with T20 and T21 in centre frame.*

SECTION 1

TS - 'Section 2'



Ref	Species	Height (m)	Life Stage	RPA Radius (m)	RPA (m2)
T1	Oak (English)	11	M	8.2	209
T2	Oak (English)	16	M	10.2	327
T3	Ash (Common)	11	LM	10.8	366
T4	Oak (English)	8	Y	1.3	5
T5	Oak (English)	9.5	Y	3.6	41
T6	Oak (English)	5	Y	2.6	22
T7	Oak (English)	18	M	9.6	290
T8	Oak (English)	12	SM	4.2	55
T9	Oak (English)	5	Y	1.8	10
T10	Maple (Field)	8	EM	4.2	55
T11	Oak (English)	18	M	9	254
T12	Ash (Common)	12	EM	4.5	65
T13	Cypress (Lawson)	7.5	SM	3.6	41
T14	Removed	-	-	-	-
T15	Oak (English)	14	LM	12	452
T16	Oak (English)	18	M	13.2	547
T17	Oak (English)	18	M	13.2	547
T18	Oak (English)	10	M	9.1	261
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T20	Oak (English)	19	M	15	707
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T23	Oak (English)	19	M	15	707
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T26	Oak (English)	9.5	M	8.2	209
T27	Oak (English)	16	M	15	707
T28	Oak (English)	18	M	9.4	275
T29	Oak (English)	19	M	13.4	567
T30	Oak (English)	18	M	13.4	567
T31	Oak (English)	13	M	7.8	191
T32	Oak (English)	14	M	10.7	358
T33	Oak (English)	11.5	M	8.4	222
T34	Sycamore	9	Y	1.8	10
T35	Ash (Common)	10	Y	3	28
T36	Ash (Common)	12	Y	3.8	46
T37	Ash (Common)	10	EM	4.2	55
T38	Oak (English)	11	M	7.8	191
T39	Oak (English)	17	M	14.4	651
T40	Eucalyptus	7.5	EM	4.2	55
T41	Oak (English)	7	Y	4.2	55
T42	Oak (English)	12	M	9	254
H1	Blackthorn, common hawthorn	3	SM	0.6	-
H2	Blackthorn, common hawthorn, crack willow, field maple, elder, hazel	4	SM	1.3	-
H3	Blackthorn, common hawthorn, hazel, elder, oak	3	Y	0.6	-
H4	Blackthorn, hazel, field maple	1.2	SM	0.6	-
H5	Blackthorn, Common hawthorn, hazel, field maple	1.5	SM	0.6	-
H6	Hazel, blackthorn, common hawthorn.	2	SM	1	-
H7	Leyland Cypress	2	SM	1	-
H8	Hawthorn , privet, bramble, dog rose	1.2	Y	0.6	-
H9	Elder, blackthorn	2	SM	0.6	-
H10	Elder, blackthorn, hawthorn, hazel, holly, oak	2	M	1.1	-
H11	Blackthorn, elder, hawthorn	1.5	SM	0.6	-
H12	Blackthorn, hazel, privet, ash, English oak	1.2	SM	0.6	-
H13	Hawthorn, blackthorn, hazel, dogwood, field maple	3	EM	0.6	-
H14	Hazel, hawthorn, blackthorn, field maple	2	EM	0.6	-
H15	Hawthorn, blackthorn, field maple, English oak, sycamore	2.2	SM	0.6	-
G1	Crack willow	7-11	SM	4.8	-
G2	English, first maple, crack willow	7-14	M	9	-
G3	Raywood ash, sycamore, English oak, silver maple, purple leaved plum, blackthorn, field maple	2-5-9	SM	3	-
G4	Field maple	7-9	SM	3	-
G5	Blackthorn, common hawthorn	4-4.5	SM	1	-
G6	Hazel, common hawthorn, blackthorn	4-6	EM	1.8	-
G7	Leyland Cypress, Lawson cypress, holly	5-10	EM	7.2	-
G8	Leyland Cypress, Lawson cypress, beech	2-6	SM	1.8	-
G9	Goat willow	7-9	M	7.8	-
G10	English oak	12-16	M	12.7	-
G11	English oak	10-11	EM	6.6	-
G12	Blackthorn, Hawthorn	4-5	EM	1.8	-
G13	Apple var.	04-05	EM	2.4	-
G14	Common ash, field maple, English oak, Norway spruce	3-11	EM	3	-
G15	Field maple, English oak	6-9	EM	2.1	-
G16	Field maple, common ash	5-7	EM	1.8	-

KEY

- Category A Tree - High quality (Retention highly desirable)
- Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
- Category B Tree - Moderate quality (Retention desirable)
- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
- Category C Tree - Low quality (May be retained but should not constrain development)
- Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
- Category U Tree - Very low quality (Mostly unsuitable for retention)
- Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
- Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
- Shrub mass/offsite tree/out of scope (OOS)

Ancient Tree / Woodland or Veteran Trees

- Ancient tree/woodland or Veteran tree: Important trees that require special consideration
- Ancient tree/woodland or Veteran tree buffer: As per published standing advice from Natural England and the Forestry Commission

Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice

N
GRID NORTH

0 10 20 30 40 50
Meters

PROJECT TITLE
Land at Partridge Green, West Grinstead

DRAWING TITLE
Tree Survey & Constraints Plan

SCALE		DRAWING NUMBER
1:1000	@ A1	BHA_4621_01

DRAWN BY	APPROVED BY	REVISION	SHEET	DATE
DV	RH	A	-	01/10/2024

LAYOUT USED WITHIN DRAWING **xxxxxxxxxx**

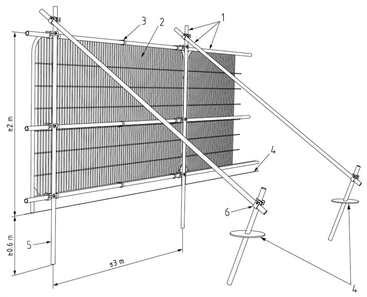
CLIENT **Croudace Homes**

COORDINATE SYSTEM / DATUM **British National Grid / Newlyn Datum (AOD)**

Barton Hyett Associates
Arboricultural Consultants

Tel: 01386 576161 Website: www.barton-hyett.co.uk
Address: Barn 2,Oxpens Farm,Yanworth, Cheltenham,Gloucestershire,GL54 3QE

BS:5837:2012 Figure 2 Default specification for protective barrier

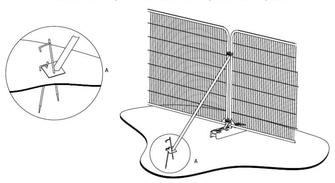


Key

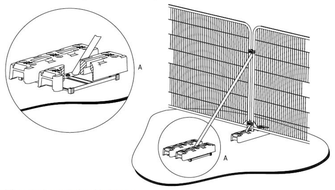
1 Standard scaffold poles
2 Heavy gauge 2 m tall galvanized tube and welded mesh infill panels
3 Panels secured to uprights and cross-members with wire ties
4 Ground level
5 Uprights driven into the ground until secure (minimum depth 0.6 m)
6 Standard scaffold clamps

For more details refer to BS:5837:2012 'Trees in relation to design, demolition and construction - Recommendations' p.20

BS:5837:2012 Figure 3 Examples of above-ground stabilizing systems



a) Stabilizer strut with base plate secured with ground pins



b) Stabilizer strut mounted on block tray

For more details refer to BS:5837:2012 'Trees in relation to design, demolition and construction - Recommendations' p.21

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H5	Blackthorn. Common hawthorn, hazel, field maple.	1.5	SM	0.6	-
H6	Hazel, blackthorn, common hawthorn.	2	SM	1	-
H7	Leyland Cypress	2	SM	1	-
H8	Hawthorn , privet, bramble, dog rose	1.2	Y	0.6	-
H9	Elder, blackthorn	2	SM	0.6	-
H10	Elder, blackthorn, hawthorn, hazel, holly, oak	2	M	1.1	-
H11	Blackthorn, elder, hawthorn	1.5	SM	0.6	-
H12	Blackthorn, hazel, privet, ash, English oak	1.2	SM	0.6	-
H13	Hawthorn, blackthorn, hazel, dogwood, field maple	3	EM	0.6	-
H14	Hazel, hawthorn, blackthorn, field maple	2	EM	0.6	-
H15	Hawthorn, blackthorn, field maple, English oak, sycamore	2.2	SM	0.6	-
G1	Crack willow	7-11	SM	4.8	-
G2	English, first maple, crack willow	7-14	M	9	-
G3	Raywood ash, sycamore, English oak, silver maple, purple leaved plum, blackthorn, field maple	2.5-9	SM	3	-
G4	Field maple	7-9	SM	3	-
G5	Blackthorn, common hawthorn	4-4.5	SM	1	-
G6	Hazel, common hawthorn, blackthorn	4-6	EM	1.8	-
G7	Leyland Cypress, Lawson cypress, holly	5-10	EM	7.2	-
G8	Leyland Cypress, Lawson cypress, beech	2-6	SM	1.8	-
G9	Goat willow	7-9	M	7.8	-
G10	English oak	12-16	M	12.7	-
G11	English oak	10-11	EM	6.6	-
G12	Blackthorn, Hawthorn	4-5	EM	1.8	-
G13	Apple var.	04-05	EM	2.4	-
G14	Common ash, field maple, English oak, Norway spruce	3-11	EM	3	-
G15	Field maple, English oak	6-9	EM	2.1	-
G16	Field maple, common ash	5-7	EM	1.8	-

KEY

- Category A Tree - High quality (Retention highly desirable)
- Category A - Hedgerow, Group, Woodland - High quality (Retention highly desirable)
- Category B Tree - Moderate quality (Retention desirable)
- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
- Category C Tree - Low quality (May be retained but should not constrain development)
- Category C - Hedgerow, Group, Woodland - Low quality (May be retained but should not constrain development)
- Category U Tree - Very low quality (Mostly unsuitable for retention)
- Category U - Hedgerow, Group, Woodland - Very low quality (Mostly unsuitable for retention)
- Root Protection Area (RPA) - Layout design tool indicating the minimum area around a tree deemed to contain sufficient roots and soil volume to maintain the tree's viability
- Shrub mass/offsite tree/out of scope (OOS)

Ancient Tree / Woodland or Veteran Trees

- Ancient tree/woodland or Veteran tree: Important trees that require special consideration
- Ancient tree/woodland or Veteran tree buffer: As per published standing advice from Natural England and the Forestry Commission

Impacts

- Tree / Hedgerow / Group to be removed

Protection Measures

- Primary Tree Protection Barrier (Figure 2 of BS5837:2012)
- Secondary Tree Protection Barrier (Figure 3 of BS5837:2012) - location to allow works within CEZ (only in accordance with detailed AMS)
- Cellular Confinement System for no dig path in Buffer of T23(see AMS report for specification)

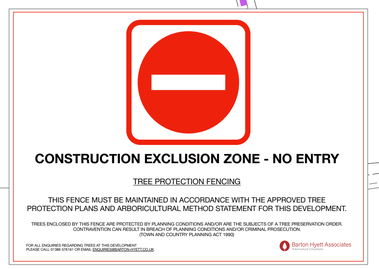
Construction Exclusion Zone(s)

INSTALLING PROTECTION
Protective barriers and ground protection (as approved), must be installed before any materials or machinery are brought onto the site and before the commencement of any demolition, general site clearance, ground or construction works of any description.

RETENTION OF PROTECTION
All protective measures must remain fully intact, vertical (in the case of barriers) and in their approved locations from the outset of the development. They must be maintained, at all times, until all works have been completed on site, including any earthworks and associated soft landscaping works. Any approved phasing of protective measures must be fully observed and complied with.

RESTRICTIONS
Construction Exclusion Zone(s) are to remain completely undisturbed for the duration of all development works. No construction activity of any description including but not limited to the following must occur within these areas at any time.

- No excavation of any description.
- No storage, disposal of soil, rubble or materials of any other description.
- No alterations to existing levels or ground conditions.
- No vehicular access, parking or use of any tracked or wheeled machinery of any description.
- No tree works, without the written consent of the Council's Planning service.
- No erection of temporary structures of any description.
- No fires.
- No storage disposal handing or use of any chemicals including cement washings.
- No fixtures or fittings of any description, security lighting, signage etc shall be attached to any part of a tree.
- No fires shall be light within 10 metres of the canopies of any tree or spread of any hedge.
- No chemicals, fuel, liquids/waste residues of any other description to be stored or disposed of within close proximity to or drained towards/into protected areas.



Note: The original of this drawing was produced in colour – a monochrome copy should not be relied upon. This drawing should be interpreted with reference to the accompanying tree schedule and written advice

N
GRID NORTH

0 10 20 30 40 50
Meters

PROJECT TITLE
Land at Partridge Green, West Grinstead

DRAWING TITLE
Tree Retention/Removal and Protection Plan

SCALE		DRAWING NUMBER			
1:1000	@ A1	BHA_4621_02			
DRAWN BY	APPROVED BY	REVISION	SHEET	DATE	
DV	RH	-	-	01/10/2024	

LAYOUT USED WITHIN DRAWING **7034-PL-02P2 - Site Layout**

CLIENT **Croudace Homes**

COORDINATE SYSTEM / DATUM **British National Grid / Newlyn Datum (AOD)**

Barton Hyett Associates
Arboricultural Consultants
Tel: 01386 576161 Website: www.barton-hyett.co.uk
Address: Barn 2,Oxpens Farm,Yanworth,
Cheltenham,Gloucestershire,GL54 3QE

TREE SURVEY SCHEDULE

SITE NAME: LAND AT PARTRIDGE GREEN

PROJECT NO: 4621

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Barton Hyett
Arboricultural Consultants

INDIVIDUAL TREES

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam ?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran/ Ancient Tree buffer radius (m)
T1	Oak (English)	On	11.0	1	Yes	680	5-5-6-5	2.0	2.5	S	M	None	Good form tree. Ditch at base to west. Side flailed branches on lower crown.	Good	Fair	40+	B1	8.2	209	-
T2	Oak (English)	On	16.0	1	Yes	850	8-12-10-8	4.0	3.0	S	M	None	Good form tree. Lower leaf density than expected but good primary and secondary branch structure.	Good	Good	40+	A1	10.2	327	-
T3	Ash (Common)	Off	11.0	1	Yes	900	6-8-5-6	2.5	2.0	E	LM	Emerging Veteran	Located offsite. Ditch at base. Hollow tree with established decay and open trunk. Retrenching crown although leaf condition good. Small pocket of fungi at 1m on stem.	Poor	Poor	20+	B3	10.8	366	13.5
T4	Oak (English)	On	8	1	Yes	100	2-2-1-1	1.5	1.0	E	Y	None	Newly planted. Good form. Downgraded on basis of small size only.	Good	Good	40+	B1	1.3	5	-
T5	Oak (English)	On	9.5	1	Yes	300	4-4-4-5	2.5	2.5	E	Y	None	Good form and establishing well, but located at base of overhead power line pole.	Good	Fair	20+	B1	3.6	41	-
T6	Oak (English)	On	5.0	1	Yes	220	3-4-2-3	2.5	1.5	SW	Y	None	Establishing well. Squat form.	Good	Fair	40+	B2	2.6	22	-
T7	Oak (English)	Off	18.0	1	Yes	800	8-11-13-9	5.0	4.0	S	M	None	Large offsite tree located on north side of lane. Southern branches over hang site and are touching overhead power lines.	Good	Good	40+	A1	9.6	290	-
T8	Oak (English)	On	12	1	Yes	350	6-3-7-6	3.0	3.0	SW	SM	None	Dense Ivy on stem. Lower branches on site side trimmed with flail.	Good	Fair	20+	B2	4.2	55	-
T9	Oak (English)	Off	5.0	1	Yes	150	3-3-3-2	2.5	2.0	E	Y	None	Squat form. Chlorotic appearance of leaves. Side flailed on site side.	Fair	Fair	10+	C1	1.8	10	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Barton Hyett
Arboricultural Consultants

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam ?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran/ Ancient Tree buffer radius (m)
T10	Maple (Field)	On	8.0	1	Yes	350	4-4-3-4	4.0	3.0	NW	EM	None	On side of ditch, no access to stem. Dense Ivy on stem and primary limbs.	Good	Fair	20+	B2	4.2	55	-
T11	Oak (English)	Off	18.0	1	Yes	750	10-9-6-5	5.0	5.0	E	M	None	Offsite in adjacent garden. No access to stem. Good crown form. Within larger group of trees.	Good	Fair	40+	A2	9.0	254	-
T12	Ash (Common)	Off	12.0	1	Yes	380	8-2-4-7	3.0	4.0	S	EM	None	Offsite in adjacent garden. No access to stem. Part of larger tree group.	Fair	Fair	20+	C2	4.5	65	-
T13	Cypress (Lawson)	Off	7.5	1	Yes	300	2-2-2-2	2.0	2.0	S	SM	None	Low leaf density.	Fair	Fair	10+	C1	3.6	41	-
T14	Willow (Goat)	-	-	-	-	-	-	-	-	-	-	-	Tree removed	-	-	-	-	-	-	-
T15	Oak (English)	On	14.0	1	Yes	1000	7-6-6-5	7.0	3.5	E	LM	None	Dead tree, may need some remedial work if land use under tree changes. High habitat value.	Poor	Fair	10+	C3	12.0	452	-
T16	Oak (English)	On	18.0	1	Yes	1100	11-9-7-7	6.0	6.5	E	M	None	Good leaf density, appears to have improved in vitality from last survey. On top of ditch bank. Ditch to north. Plough line to	Good	Good	40+	A1	13.2	547	-
T17	Oak (English)	On	18.0	1		1100	7-9-10-8	5.0	3.5	S	M	None	Good form tree although large limb lost on north side in past. Good lead density and vitality. Numerous branch tear scars. Typical for species and age. Plough line 2m to north.	Good	Good	40+	A1	13.2	547	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Barton Hyett
Arboricultural Consultants

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam ?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran/ Ancient Tree buffer radius (m)
T18	Oak (English)	On	10.0	1		760	4-5-6-3	6.0	4.0	S	M	None	Tight stem union at 4m. In established state of decline. 75% dead but good vitality in remaining crown, could be managed to prolong life and retained	Fair	Fair	20+	C3	9.1	261	-
T19	Oak (English)	On	14.0	1		740	9-6-7-7	4.0	4.0	SE	M	None	Good form tree. Leafs show good vitality. Deep ditch to south.	Good	Good	40+	A1	8.9	248	-
T20	Oak (English)	On	19	1		1510	8-13-14-13	6.0	3.0	S	M	Veteran	Ploughing of ground under tree seems to have ceased. Has increased vigour. Leaf density and vitality poor. Would benefit from the cessation of ploughing at base. Numerous branch loss scars, splits and small decay pockets and deadwood. Exposed and	Good	Good	20+	A3	15.0	707	22
T21	Oak (English)	On	19	1		1050	11-10-5-8	6.0	6.0	NW	M	Emerging Veteran	Ploughing of ground under tree seems to have ceased. Has increased vigour. Tree has lower leaf density and vitality than expected. Would benefit from the cessation of ploughing at base. Deadwood throughout crown. Crown lifted in past. Has	Good	Good	40+	A1	12.6	499	16
T22	Oak (English)	On	13	1		800	6-8-7-7	2.5	3.0	W	M	None	Good foliar health. Squat form. Plough line to base of tree. Would benefit from the cessation of ploughing. Swelling at base of stem. Small ganoderma bracket fungus observed.	Good	Fair	40+	A1	9.6	290	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam ?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran/ Ancient Tree buffer radius (m)
T23	Oak (English)	On	19	1		1270	9-10-9-9	5.0	5.0	N	M	Veteran	Appears to have improved in vitality due to cessation of ploughing. Large vertical scar on north side of stem from old limb loss. Abundance of ganoderma fungal fruiting bodies. (Old and more recent). Limb loss scars, deadwood. May need remedial work for	Fair	Fair	40+	A3	15.0	707	19
T24	Oak (English)	On	14.0	1		1010	7-9-7-7	2.5	5.0	S	M	None	Plough line very close to the base of tree. Deadwood in crown. Recent mechanical damage to stem. Would benefit from the cessation of ploughing at base.	Good	Good	40+	A1	12.1	461	-
T25	Oak (English)	On	12.0	1		1060	5-6-5-6	1.0	1.0	S	M	Veteran	Tree crown is retrenching with secondary crown establishing from Epicormic growth. Leaf condition is good. Exposed and elevated buttress roots. Has old appearance. Deadwood in crown. Numerous branch loss scars. Small fistulina hepatic at base and at 2.5m.	Good	Fair	40+	A3	12.7	508	16
T26	Oak (English)	On	9.5	1		680	3-4-3-5	4.0	4.0	S	M	None	Split out primary limb at 4m. Column of decay in main stem. Fistulina hepatica fruiting bodies observed. Remaining crown retrenching.	Fair	Fair	20+	A3	8.2	209	-
T27	Oak (English)	On	16.0	1		1250	6-12-9-9	5.0	4.5	SW	M	None	Good leaf vitality. Numerous branch loss scars and deadwood throughout crown.	Good	Fair	40+	A3	15.0	707	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam ?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran/ Ancient Tree buffer radius (m)
T28	Oak (English)	On	18.0	1		780	8-9-8-5	4.0	5.0	E	M	None	Good form tree. Good leaf vitality. Ditch to south of stem.	Good	Good	40+	A1	9.4	275	-
T29	Oak (English)	On	19.0	1		1120	9-10-8-8	5.0	3.5	SE	M	None	Typical form and condition for mature oak. Drawn up form due to presence of adjacent trees.	Good	Good	40+	A1	13.4	567	-
T30	Oak (English)	On	18	1		1120	6-8-9-11	5.0	5.0	E	M	None	Heavily reduced in past. Adjacent overhead power lines and recently side pruned on north side. Asymmetric crown. Branch tear scars and small decay pockets at old pruning wounds.	Good	Fair	40+	B3	13.4	567	-
T31	Oak (English)	On	13.0	1	Yes	650	7-9-7-8	3	3.0	W	M	None	In hedgerow at top of ditch bank. Ditch to south. Light pruning of branches on north side to provide clearance to overhead power lines. Low leaf density. Leaves appear chlorotic in colour.	Fair	Fair	40+	B1	7.8	191	-
T32	Oak (English)	On	14.0	2	Yes	890	8-18-8-7	3	2.5	NE	M	None	Twin stemmed from ground level. On top of ditch bank. Ditch to south. Low leaf density in upper crown.	Fair	Good	40+	B1	10.7	358	-
T33	Oak (English)	On	11.5	1	Yes	700	9-9-9-7	3.0	3.0	N	M	None	Dense Ivy on stem and primary limbs. On top of ditch bank. Ditch to south.	Good	Fair	40+	B1	8.4	222	-
T34	Sycamore	On	9	1	Yes	150	2-2-3-2	3.5	3.5	S	Y	None	Typical for species and age.	Good	Fair	20+	B1	1.8	10	-
T35	Ash (Common)	On	10	1	Yes	250	4-5-5-4	2.5	3.0	E	Y	None	Ivy on stem. Typical for species and age. No signs of ash dieback.	Good	Fair	40+	B2	3.0	28	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Barton Hyett
Arboricultural Consultants

Ref	Species	On/off site	Top Height (m)	No. of Stems	Est diam ?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. low crown height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran/ Ancient Tree buffer radius (m)
T36	Ash (Common)	On	10.0	2	Yes	320	5-4-4-1	2.5	4.0	N	Y	None	Twin stemmed. No access to stems. Asymmetric crown. No signs of ash dieback	Good	Fair	20+	B1	3.8	46	-
T37	Ash (Common)	On	10.0	1	Yes	350	4-5-5-2	3.0	4.0	SE	EM	None	No access to stem. Crown reduced on western side in past.	Good	Fair	20+	B2	4.2	55	-
T38	Oak (English)	On	12	1	Yes	650	8-8-8-5	3.5	3.0	NE	M	None	Squat form. Dense Ivy on stem. Ditch to north.	None	Fair	40+	B1	7.8	191	-
T39	Oak (English)	Off	17.0	1	Yes	1200	10-10-12-10	3.0	3.0	NW	M	None	Fine specimen of a tree. Offsite. No access to stem.	Good	Good	40+	A1	14.4	651	-
T40	Eucalyptus	Off	10	1	Yes	350	3-7-4-4	3.0	1.0	W	EM	None	Offsite in adjacent garden. No access to stem. Typical for species and age.	Fair	Fair	20+	C1	4.2	55	-
T41	Oak (English)	On	7.0	1	-	350	5-6-5-6	1.0	1.0	W	Y	None	Good form tree with future potential.	Good	Fair	40+	B1	4.2	55	-
T42	Oak (English)	Off	12.0	1	Yes	750	7-10-7-8	4.0	3.0	E	M	None	Good form tree. Dense Ivy on stem and primary branches. No access to stem. Deep ditch to north of stem. Minor deadwood in crown. Typical for species and age.	Good	Good	40+	A1	9.0	254	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Barton Hyett
Arboricultural Consultants

GROUPS OF TREES

Ref	Species	On/off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. low crown height (m)	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran/ Ancient Tree buffer radius (m)
G1	Crack willow	On	7-11	9	Yes	400	4.5	1.5	SM	None	Close grown group of trees. Number of trees estimated. Minor hawthorn also present. Located around sunken wet area.	Good	Fair	20+	B2	4.8	-
G2	English, first maple, crack willow	Off	7-14	6	Yes	750	5.0	4.0	M	None	Offsite trees. No access to stem. Number of trees estimated. Largest Dbh on oak to south west of group.	Good	Fair	40+	B2	9.0	-
G3	Raywood ash, sycamore, English oak, silver maple, purple leaved plum, blackthorn, field maple	On	2.5-9	13	Yes	250	4.0	2.0	SM	None	Dense planted group of trees. No access to stems. Number of trees estimated.	Good	Good	20+	B2	3.0	-
G4	Field maple	On	7-9	5	Yes	250	3.0	2.0	SM	None	Clos3 grown group of trees. On embankment down from road.	Good	Good	20+	B2	3.0	-
G5	Blackthorn, common hawthorn	On	4-4.5	8	Yes	75	2.0	2.0	SM	None	Retained section of hedgerow that was not recently flailed. Number of trees estimated. Bramble starting to dominate.	Fair	Fair	20+	C2	1.0	-
G6	Hazel, common hawthorn, blackthorn	On	4-6	8	Yes	150	2.5	0.5	EM	None	Remnant section of hedgerow along kind of ditch. No access to stems. Number of trees estimated.	Good	Fair	20+	B2	1.8	-
G7	Leyland Cypress, Lawson cypress, holly	Off	5-10	7	Yes	600	3.0	1.0	EM	None	Offsite in adjacent garden. No access to stems. Largest Dbh from Leyland Cypress at western end. Canopies removed from leyland trees leaving 5 m trunk standing.	Fair	Fair	20+	C2	7.2	-
G8	Leyland Cypress, Lawson cypress, beech	Off	2-6	5	Yes	150	2.0	1.0	SM	None	Offsite in adjacent garden. No access to stems.	Fair	Fair	20+	C2	1.8	-
G9	Goat willow	On	7-10	2	Yes	650	5.0	3.0	M	None	Two close grown trees with single crown. Located in ditch. Typical for species and age.	Good	Fair	20+	B2	7.8	-
G10	English oak	On	12-16	3	-	1060	7.0	5.0	M	Veteran	Three close grown trees with single crown. Central tree is largest. Northern tree dead.. Southern most tree successfully retrenching. Numerous decay pockets, branch loss scars and deadwood. Central tree has fistulina hepatica at base	Fair	Fair	40+	A3	12.7	12
G11	English oak	Off	10-11	2	Yes	550	4.0	5.0	EM	None	Offsite in adjacent garden. No access to stems	Fair	Fair	20+	B2	6.6	-

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Ref	Species	On/off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. low crown height (m)	Life Stage	Special importance	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran/ Ancient Tree buffer radius (m)
G12	Blackthorn, Hawthorn	Off	4-5	3	Yes	150	2.0	2.0	EM	None	Offsite in adjacent garden. No access to stem. Number of trees estimated.	Fair	Fair	20+	C2	1.8	-
G13	Apple var.	On	4-5	2	Yes	200	3.0	2.0	EM	None	In allotment garden. No access to stems. All dimension estimated. Condition assumed.	Fair	Fair	20+	C2	2.4	-
G14	Common ash, field maple, English oak, Norway spruce	On	3-11	16	Yes	250	3.0	2.5	EM	None	Close crown group of trees. Most trees have drawn up form. Ditch to north side of stems.	Fair	Fair	20+	B2	3.0	-
G15	Field maple, English oak	On	6-9	4	Yes	175	2.5	2.0	EM	None	Along edge of drive. Ditch to north.	Fair	Fair	20+	C2	2.1	-
G16	Field maple, common ash	On	5-7	4	Yes	150	2.0	2.5	EM	None	Outgrown from hedgerow, possible remnant hedgerow. Ditch to north.	Fair	Fair	20+	C2	1.8	-

HEDGEROWS

Ref	Species	On/off site	Av. Height (m)	Av. width (m)	Av. Stem diam (mm)	Avg. low crown height (m)	Life Stage	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)
H1	Blackthorn, common hawthorn	On	3.0	3	50	0.2	SM	Remnant hedgerow/thicket. Side flailed on site side.	Fair	Fair	20+	C2	0.6
H2	Blackthorn, common hawthorn, crack willow, field maple, elder, hazel	On	4.0	4	100	0.2	SM	On boundary with farm building. Good visual screen, some minor gaps. May require future management to increase longevity.	Good	Fair	20+	C2	1.3
H3	Blackthorn, common hawthorn, hazel, elder, oak	On	3.0	4	50	0.2	Y	Relatively recently planted hedgerow. Typical for species and age. Downgraded only on basis of small size.	Good	Fair	40+	C2	0.6
H4	Blackthorn, hazel, field maple	On	1.2	2	50	0.0	SM	Heavily flailed in recent past. Gappy and dominated by bramble under trees.	Fair	Fair	20+	C2	0.6
H5	Blackthorn. Common hawthorn, hazel, field maple.	On	1.5	2	50	0.0	SM	Recently heavily managed by flail. Planted in species blocks. Bramble and bracken dominate in parts.	Fair	Fair	20+	C2	0.6
H6	Hazel, blackthorn, common hawthorn.	On	3.0	3.0	75	0.2	SM	Managed by flail. Bramble and bracken dominate in parts. Gappy in some parts.	Fair	Fair	20+	C2	1.0
H7	Leyland Cypress	Off	2.0	1.0	75	0.0	SM	Tightly clipped garden hedge	Fair	Fair	20+	C2	1.0

TREE SURVEY SCHEDULE

PROJECT NO: 4621

SITE NAME: LAND AT PARTRIDGE GREEN

SURVEYOR: RH ANF LF

CLIENT: CROUDACE HOMES

SURVEY DATE: SEPT 2021 AND APRIL 24

Ref	Species	On/off site	Av. Height (m)	Av. width (m)	Av. Stem diam (mm)	Avg. low crown height (m)	Life Stage	General Observations	Health & vitality	Structural condition	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)
H8	Hawthorn , privet, bramble, dog rose	Off	1.2	1.0	50	0.0	Y	Maintained native garden hedge. Bramble dominates in south. Some damson/plum trees present in south.	Fair	Fair	20+	C2	0.6
H9	Elder, blackthorn	On	2.0	1.5	50	0.0	SM	Heavily managed with flail. Ditch to south.	Fair	Fair	10+	C2	0.6
H10	Elder, blackthorn, hawthorn, hazel, holly, oak	On	2.0	2.0	90	0.0	M	Ditch to south. Intensively managed by flail. Gappy in parts and bramble dominates some sections.	Fair	Fair	20+	C2	1.1
H11	Blackthorn, elder, hawthorn	On	1.5	2.0	50	0.0	SM	Intensively managed with flail. Ditch to south. Bramble dominates in parts.	Fair	Fair	20+	C2	0.6
H12	Blackthorn, hazel, privet, ash, English oak	Off	1.2	1.0	50	0.0	SM	Offsite in adjacent gardens	Fair	Fair	10+	C2	0.6
H13	Hawthorn, blackthorn, hazel, dogwood, field maple	On	3.0	3.0	50	0.0	EM	Intensively managed by flail. Forms bo7ndary to allotments.	Fair	Fair	20+	C2	0.6
H14	Hazel, hawthorn, blackthorn, field maple	On	2.0	2.0	50	0.0	EM	Intensively managed with flail. Ditch to north.	Fair	Fair	20+	C2	0.6
H15	Hawthorn, blackthorn, field maple, English oak, sycamore	On	2.2	2.0	50	0.0	SM	Boundary to allotment gardens. Managed with flail.	Good	Fair	20+	B2	0.6

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- The tree survey was carried out with reference to the methodology set out in BS 5837:2012 'Trees in relation to design, demolition and construction – Recommendations'.
- Trees were surveyed individually or as groups where it was considered that they had grown together to form cohesive arboricultural features either aerodynamically (trees that provide companion shelter), visually (e.g. avenues or screens) or culturally (including for biodiversity). However, where it was considered that there was an arboricultural need to differentiate between attributes trees within groups and/or woodlands were also surveyed as individuals.
- Within the tree survey schedule, each surveyed TREE (T), GROUP (G), HEDGEROW (H), WOODLAND (W) or SHRUB MASS on or adjacent to the site is given a reference number which refers to its position on the tree survey and constraints plan.
- TREE SPECIES are listed by common name.
- OOS: The recorded Out Of Scope trees and features refer to either a dead-standing or failed tree; a stump or minor shrubs; where trees are inaccessible or located off-site and unlikely to be affected by the development or, it is found that the trees are undersized according to BS 5837:2012, which stipulates a minimum recordable diameter of 75mm.

The **DIMENSIONS** taken are:

- STEM-No. indicates the number of main stems (i.e. whether the trunk divides at or below 1.5m; (used in the calculation of root protection area (RPA)) "m-s" = Multi-stemmed.
- STEM DIAMETER (measured in millimetres), obtained from the girth measured at approx. 1.5m. For trees with 2 to 5 sub-stems, a notional figure is derived from the sum of their cross-sectional areas. For multi-stemmed trees, the notional diameter may be estimated on the basis of the average stem size x the number of stems. Note: a notional diameter may be estimated where measurement is not possible.
- HEIGHT (measured in metres), recorded to the nearest half metre for dimensions up to 10m and to the nearest whole metre for dimensions over 10m.
- The CROWN SPREAD, taken at the four cardinal points to derive an accurate representation of the tree crown, recorded up to the nearest half metre for dimensions up to 10m and to up the nearest whole metre for dimensions over 10m.
- CROWN CLEARANCES, expressed both as the existing height above ground level of the first significant branch along with its direction of growth (e.g., 2.5m-N) and also in terms of the overall crown e.g., the average height of the crown above ground level. Measurements are recorded to the nearest half metre for dimensions up to 10m and to the nearest whole metre for dimensions over 10m.
- ESTIMATES: where any measurement has had to be estimated, e.g., due to inaccessibility, this is indicated by a "#" suffix to the measurement as shown in the Tree Survey Schedule.

LIFE STAGE is defined as follows:

Y Young: Normally stake dependent, establishing trees. Should be growing fast, usually primarily increasing in height more than spread but as yet making a limited impact upon the landscape.

SM Semi-mature: Established young trees, normally of good vigour and still increasing in height but beginning to spread laterally. Beginning to make an impact on the local landscape and environment. Semi-mature are still capable of being transplanted without preparation, up to 300mm girth and not yet sexually mature.

EM Early-mature: Not yet having reached 75% of expected mature size. Established young trees, normally of good vigour and still increasing in height but beginning to spread laterally. Beginning to make an impact on the local landscape and environment.

M Mature: Well-established trees, still growing with some vigour but tending to fill out and increase spread. Bark may be beginning to crack and fissure. In the middle half of their safe, useful life expectancies.

LM Late-mature: In full maturity but possibly beyond mature and in a state of natural decline. Still retaining some vigour but any growth is slowing.

A Ancient: A tree that has passed beyond maturity and is old/aged compared with other trees of the same species. Typically having a very wide trunk and a small canopy.

PHYSIOLOGICAL CONDITION (HEALTH & VITALITY):

Essentially a snapshot of the general health of the tree based upon its general appearance, its apparent vigour and the presence or absence of symptoms associated with poor health, physiological stress etc. (fungal infections may be recorded here but decay giving rise to structural weakness would be recorded under 'Structural Condition' – see next parameter):

Good: No significant health issues.
Fair: Indications of slight stress or minor disease (e.g., the presence of minor dieback/deadwood or epicormic shoot growth).
Poor: Significant stress or disease noted; larger areas of dieback than above.
Dead: (or Moribund).

STRUCTURAL CONDITION:

Features affecting the structural stability of the tree include decay, significant deadwood, root-plate instability or significant damage to structural roots, weak forks (e.g. those where bark is included between the members) etc. Classified as:

Good: No obvious structural defects: basically sound.
Fair: Minor, potential or incipient defects.
Poor: Significant feature(s) likely to lead to actual failure in the medium- to long-term.
Dead: (or Moribund).

ESTIMATED REMAINING CONTRIBUTION:

An estimate of the length of time in years that a tree might be expected to continue to make a useful contribution to the locality at an acceptable level of risk (based on an assumption of continued routine maintenance):

- Less than 10 years
- 10+ years
- 20+ years
- 40+ years

SPECIAL IMPORTANCE:

Trees that are particularly notable as high-value trees such as ancient trees/woodland or veteran trees. Such trees may be regarded as the principal arboricultural features of a site and pose a significant constraint to potential development.

An ***ancient*** tree is one that has passed beyond maturity and is very old compared with other trees of the same species. Very few trees reach the ancient life stage. ***Veteran*** trees are often very old but not necessarily so; they may be regarded as 'survivors' that have developed some of the characteristic features of an ancient tree but have not necessarily lived as long. All ancient trees are veterans but not all veteran trees are ancient.

The term '*notable*' carries no weight within the National Planning Policy Framework (NPPF), but is a term that recognises a mature tree which may stand out in the local environment because it is large in comparison with other trees around it.

Ancient woodland is an area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland (ASNW), plantations on ancient woodland sites (PAWS) and ancient replanted woodland (ARW).

QUALITY CATEGORY:

Trees are classed as category U, A, B or C, based on criteria given in BS 5837:2012; summary definitions as follows (see BS 5837 for further details). Categories A, B and C are further characterised by the use of sub-categories, which attempt to identify what aspect of the tree is the main source of its perceived value, These are:

(1) arboricultural qualities
(2) landscape qualities, and
(3) cultural, historic or ecological/conservation qualities.

Examples of these qualities for each of the three categories are given below, although these are indicative only.

Note: This is NOT a health and safety classification; the classification does not take into account any requirement for remedial tree care or ongoing maintenance apart from that which may affect the trees' general suitability for retention.

CATEGORY A: HIGH QUALITY:

Trees or groups whose retention should be given a particularly high priority within the design process. Normally with an expected useful life expectancy of at least 40 years.

A1: Notably fine specimens; rare or unusual specimens; essential component trees within groups, semi-formal or formal plantings (e.g., dominant trees within an avenue etc.).
A2: Trees, groups or woodlands of particular visual importance as landscape features.
A3: Trees, groups or woodlands of particular significance by virtue of their conservation, historical, commemorative or other value (e.g., veteran trees or wood pasture).

CATEGORY B: MODERATE QUALITY

Trees or groups of some importance with a likely useful life expectancy in excess of 20 years. Their retention would be desirable; selective removal of certain individuals may be acceptable but only after full consideration of all alternative courses of action.

B1: Fair quality but not exceptional; good specimens showing some impairment (e.g., remediable defects, minor storm damage or poor past management).
B2: Acceptable trees situated such as to have little visual impact within the wider locality. Also the number of trees, perhaps in groups or woodlands, whose value as landscape features is greater collectively than would warrant as individuals (such that the selective removal of an individual would not impact greatly upon the trees' overall, collective value).
B3: Trees, groups or woodlands with clearly identifiable conservation or other cultural benefits.

CATEGORY C: LOW QUALITY:

Trees or groups of rather low quality, although potentially capable of retention for at least approx. 10 years. Also small trees with stems below 150mm diameter.

Potentially retainable, but not of sufficient value to be regarded as a significant planning constraint.

C1: Unremarkable trees of very limited merit or significantly impaired condition.
C2: Trees offering only low- or short-term landscape benefits; also secondary specimens within groups or woodlands whose loss would not significantly diminish their landscape value.
C3: Trees with extremely limited conservation or other cultural benefits.

CATEGORY U: VERY LOW QUALITY

Trees likely to prove to be unsuitable for retention for longer than 10 years should any significant increase in site usage arise as a result of development. E.g., dead or moribund trees; those at risk of collapse or in terminal decline; trees that will be left unstable by other essential works such as the removal of nearby category U trees; trees infected by pathogens that could materially affect other trees; low-quality trees that are suppressing better specimens. (Category U trees may have conservation values that it might be desirable to preserve. This category may also include trees that should be removed irrespective of any development proposals.)

ROOT PROTECTION AREA (RPA):

These are normally represented as a circle centred on the base of each tree stem with a radius of 12 times the stem diameter, measured at 1.5m above ground level. The shape of the RPA may be altered where site conditions dictate that there are sound reasons to do so.

VETERAN OR ANCIENT TREE BUFFER (VTB/ATB)

In line with the Standing Advice produced by the Forestry Commission and Natural England, this is a buffer zone (in metres) around an ancient or veteran tree that should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's stem diameter.

ANCIENT WOODLAND BUFFER (FOR ASNW, PAWS OR ARW)

In line with the Standing Advice produced by the Forestry Commission and Natural England, this is a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, a larger buffer zone may be required.

THE IMPORTANCE OF TREES

Wider benefits:

There is a growing body of evidence that trees bring a wide range of benefits to the places people live.

Some *Economic* benefits of trees include:

- Trees can increase property values
- As trees grow larger, the lift they give to property values grows proportionately
- They can improve the environmental performance of buildings by reducing heating and cooling costs, thereby cutting bills
- Mature landscapes with trees can be worth more as development sites
- Trees create a positive perception of a place for potential property buyers
- Urban trees improve the health of local populations, reducing healthcare costs

Some *Social* benefits of trees include:

- Trees help create a sense of place and local identity
- They benefit communities by increasing pride in the local area
- They can create focal points and landmarks
- They have a positive impact on people's physical and mental health
- They can have a positive impact on crime reduction

Some *Environmental* benefits of trees include:

- Urban trees reduce the 'urban heat island effect' of localised temperature extremes
- They provide shade, making streets and buildings cooler in summer
- They help remove dust and particulates from the air
- They help to reduce traffic noise by absorbing and deflecting sound
- They help to reduce wind speeds
- By providing food and shelter for wildlife they help increase biodiversity
- They can reduce the effects of flash flooding by slowing the rate at which rainfall reaches the ground
- They can help remediate contaminated soil

On new development sites:

Trees bring many benefits to new development. Where retained successfully they can form important and sustainable elements of green infrastructure, contribute to urban cooling and reduce energy demands in buildings. Their importance is acknowledged in relation to adaptation to the effects of climate change. Other benefits brought by trees include:

- increasing property values;
- visual amenity
- softening, complementing and adding maturity to built form
- displaying seasonal change
- increasing wildlife opportunities in built-up areas
- contributing to screening and shade
- reducing wind speed and turbulence

NATIONAL PLANNING POLICY

The National Planning Policy Framework 2023 (NPPF paragraph 186) states that, when determining planning applications, local planning authorities should apply the following principle:

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.'

In this respect, the following definitions apply:

'Ancient woodland: An area that has been wooded continuously since at least 1600 AD. It includes ancient semi-natural woodland and plantations on ancient woodland sites (PAWS)', and

'Ancient or veteran tree: A tree which, because of its age, size and condition, is of exceptional biodiversity, cultural or heritage value. All ancient trees are veteran trees. Not all veteran trees are old enough to be ancient, but are old relative to other trees of the same species. Very few trees of any species reach the ancient life stage.'

Note: Further information from the National Planning Policy Guidance Suite and Standing Advice is provided in the design guidance section.

Other paragraphs of the NPPF 2023 of relevance to this report are:

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 180: *'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 the best and most versatile agricultural land, and of trees and woodland.'

STATUTORY CONTROLS

Statutory tree protection

Works to trees which are covered by Tree Preservation Orders (TPOs) or are within a Conservation Area (CA) require permission or consent from the Local Planning Authority. Where information is available on any Statutory designations such as this they are identified within the summary table in Section 1 and on the Tree Survey and Constraints Plan at Section 2.

Notwithstanding specific exceptions and in general terms, a TPO prevents the cutting down, uprooting, topping, lopping, wilful damage or wilful destruction of protected trees or woodlands without the prior written consent of the LPA.

Penalties for contravention of a TPO tend to reflect the extent of damage caused but can, in the event of a tree being destroyed, result in a fine of up to £20,000 if convicted in a Magistrates' Court, or an unlimited fine is the matter is determined by the Crown Court.

Similarly, and again notwithstanding specific exceptions, it is an offence to carry out any works to a tree in a Conservation Area with a trunk diameter greater than 75mm diameter at 1.5 height without having first provided the LPA with 6 weeks written notification of intent to carry out the works.

On many non-residential sites (excluding specific exemptions) there is also a statutory restriction relating to tree felling that relates to quantities of timber that can be removed within set time periods. In basic terms, it is an offence to remove more than 5 cubic metres of timber in any one calendar quarter without having first obtained a felling licence from the Forestry Commission.

Any proposed tree works that are planned to be carried out on site must be carried out in accordance with the statutory controls outlined. Therefore, we recommend that a further check is made with the LPA before any tree works are carried out.

Statutory Wildlife Protection

Although preliminary visual checks from ground level of likely wildlife habitats are made at the time of surveying, detailed ecological assessments of wildlife habitats are not made by the arboriculturist and fall outside of the scope for this report.

Trees which contain holes, splits, cracks and cavities could potentially provide a habitat for protected species such as bats in addition to birds and small mammals. It is advised that in some instances specialist ecological advice may be required. This may result in tree works being carried out following a detailed climbing inspection to the tree to ensure that protected species or their nests/roosts are not disturbed. If any are found, the site manager, site owner or consulting arboriculturist should be informed and appropriate action taken as recommended by the appointed Ecologist or the relevant Statutory Nature Conservation Organisation (SNCO): Natural England, Scottish Natural Heritage or Natural Resources Wales.

It is advised that tree/hedgerow works are carried out with the understanding that birds will generally nest in trees, hedges and shrubs between March and August. This time period only provides an indication of likely nesting times and as such diligence is required when undertaking tree works at all times.

Irrespective of the time of year and other than any actions approved under General Licence, it is an offence to intentionally kill, injure or take any wild bird or to intentionally take, damage or destroy the nest or eggs of any wild bird. Ideally, tree operations should be avoided during the likely bird nesting period. However, any tree works should always only be carried out following a preliminary visual check of the vegetation.

For information, the Wildlife and Countryside Act 1981 (as amended), The Countryside and Rights of Way Act 2000 (as amended) and the Conservation of Habitat and Species Regulations 2010, form the basis of the statutory legislation for flora and fauna in England and Wales. A different legislative framework applies in Scotland and Northern Ireland.
Any proposed tree works that are planned to be carried out on site must be carried out in accordance with any relevant statutory controls, outlined above.

DESIGN GUIDANCE

Approach

The approach adopts the guidelines set out in the British Standard BS 5837:2012 Trees in relation to design, demolition and construction – Recommendations. The process is broken down to coordinate with the key elements within both the RIBA Plan of Work (2013) and British Standard 5837:2012 as set out in the table below:

Information Stage	RIBA Stage	BS5837:2012
Stage A – Tree Survey	2: Concept	4: Feasibility
Stage B – Arboricultural Impact Assessment	3: Developed design	5: Proposals
Stage C – Arboricultural Method Statement	4: Technical design	6: Technical Design
Stage D – Arboricultural Site Supervision	5: Construction	7: Demolition and construction

A hierarchical approach is adopted in order to achieve optimum use of the site and location of built structures. This is set out below:

Avoid

The starting point of Site layout design should be to avoid the RPA of retained trees and provide suitable clearance from above ground constraints [tree canopies]. Where possible building lines should be at least 2m outside the RPA to provide working space for construction. However, protection measures can be taken if such clearance is not achievable.

Mitigate

Where intrusion within the RPA is unavoidable then its impact on the tree can be mitigated by specialist measures:

Foundations that avoid trenching e.g. screw piles, suspended floor slabs or casting at ground level for lightweight structures such as bin and cycle stores.

Limited use may be made for parking, drives or hard surfaces within the root protection areas, subject to advice from a qualified arboriculturist. Cellular confinement systems that enable hard surfaces to be built above existing soil levels are acceptable methods subject to site-specific soil conditions.

Service runs that cannot be routed outside the RPA(s) can be installed by, for example, thrust boring, directional drilling, air excavation or hand digging. These operations often require supervision by the project arboriculturist.

Compensate

Replacement planting can ensure the continuity of tree cover where tree removal is unavoidable or desirable. Off-site provision may be considered in some circumstances but this will require negotiation with the local planning authority.

Considerations:

For proposed residential developments, consideration must be given to numerous factors future tree growth and orientation.

Tree constraints

Root Protection Areas:

With reference to BS5837:2012, a root protection area (RPA) is defined as "a 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 should be treated as a priority". "**The default position [when considering design layout in relation to RPAs] should be that structures are located outside the RPAs of trees to be retained**".

BS5837:2012 states (4.6.2) that, "where pre-existing site conditions or other factors indicate that rooting has occurred asymmetrically, a polygon of equivalent area should be produced." The BS goes on to state that, "modifications to the shape of the RPA should reflect a soundly based arboricultural assessment of likely root distribution," and that any deviation from the original circular plot should take into account:

- Morphology and disposition of roots;
- topography and drainage;
- soil type and structure;
- the likely tolerance of the tree to root damage/disturbance.

Additional buffer zones beyond the RPA:

The following text is taken from the Standing Advice produced by the Forestry Commission and Natural England as included in the National Planning Policy Guidance:

'A buffer zone's purpose is to protect ancient woodland and individual ancient or veteran trees. The size and type of buffer zone should vary depending on the scale, type and impact of the development'.

Ancient woodland buffer:

'For ancient woodlands, you should have a buffer zone of at least 15 metres to avoid root damage. Where assessment shows other impacts are likely to extend beyond this distance, you're likely to need a larger buffer zone. For example, the effect of air pollution from development that results in a significant increase in traffic'.

Ancient and veteran tree buffer:

'A buffer zone around an ancient or veteran tree should be at least 15 times larger than the diameter of the tree. The buffer zone should be 5m from the edge of the tree's canopy if that area is larger than 15 times the tree's diameter'.

Above ground:

Above ground constraints posed by trees describe the capacity for trees to have an overbearing or dominating effect on new developments; usually post occupancy. Typical above ground constraints include a number or combination of inconveniences including shading, branch spread, movement of trees during strong winds and so on. If not adequately considered, above ground constraints can lead to repeated requests to fell or heavily prune retained and protected trees.

Shade:

Adverse shading and blocked views from windows raise concerns for incoming residents, which may lead to pressure to fell or remove trees in the future. Wherever possible it is advisable to arrange fenestration away from tree canopies to lessen the conflict, or increase window size to accommodate ambient light.

Conversely, appropriate designed development can use existing or new trees to create necessary and welcome shade and screening.

As part of the adopted approach the above considerations and constraints are assessed cumulatively in order to provide clear and site-specific advice on the areas of a site most suitable for the location of development.

Dependent on the site and nature of the proposed development, the Tree Survey and Constraints Plans may show the following:

Recommended Developable area - an advisory area defined in order to minimise arboricultural impacts using standard approaches to construction. Restricting proposed development to this area will limit the risk of harm to retained trees and of the Local Planning Authority objecting to the proposed development. It may be possible to propose development outside of this area but specific 'low impact' construction techniques may be needed recommended.

Recommended Buffer to development - similar to the Recommend Developable Area but defined as a line marking a suitable buffer to retained trees. More commonly used on large sites or sites where the presence of trees is localised.

Tree Opportunities

Depending on the scale of developments existing trees can often provide opportunities to enhance the existing arboricultural resource of a site by bringing it into good management or by putting in place remedial measures e.g. soil amelioration.

Appropriately designed new tree planting is extremely important in maintaining healthy and sustainable tree populations. For the reasons highlighted, new trees can bring many benefits to new developments. It is critical to the establishment of new tree planting that the locations, species and specification of new trees is appropriate. Subsequently the sourcing of high-quality stock, suitable planting and the provision of post planting maintenance are essential to allow new trees to establish and to allow them to mature.

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HOW TREE DAMAGE CAN OCCUR

Above the ground

Damage can occur as a result of knocks and scuffs, breakages of branches and/or tree trunks. This is often but not always associated with machine operations, groundworks excavations, tele handlers, high sided vehicles and crane use. Other forms of above ground damage include fixings to trunk and unauthorised cutting back of branches. Wounds will harm a tree's health and shorten its life by letting in disease-causing organisms.

Below the ground

It is often not appreciated that the majority of most tree roots are generally located within the top 600mm of the ground. On this basis it needs to be understood that damage to roots can occur in three ways:

- Root severance can occur as a result of, for example, soil stripping during site clearance or excavations.
- Root dieback and death can result from compaction of the soil. Compaction can occur as a result of vehicle weight, weight of stored materials or increased pedestrian access. Compaction crushes out soil pore space and prevents tree respiration from occurring (respiration requires gas exchange between the ground and the atmosphere). Compacted soil is denser and therefore inhibits/prevents any further new root growth.
- Pollution of the soil with chemicals such as oil or cement washings can destroy the soil environment, making it inhospitable for the tree cause causing it stress.

The effects of these impacts can be disfiguring to a tree's appearance and also weaken a tree making it more liable to attack by pest and diseases. In addition, root damage or death results in corresponding decline above the ground with dieback occurring within the tree crown.

The effects of damage to trees generally take some time to become fully apparent. In many cases, damaged trees decline slowly after the completion of a new development, until they eventually need to be removed due to ill health.

Tree protection barriers and load distributing 'no-dig' paths are specified in order to prevent soil compaction from taking place.

GENERAL SITE RULES FOR TREE PROTECTION

Do not independently carry out any activity that is at odds with the site scheme of tree protection. This is contained within an approved Arboricultural Method Statement (AMS) and accompanying Tree Protection Plan.

In simple terms: do not carry out any work within any Construction Exclusion Zone (CEZ) without prior liaison with the Project Arboriculturist and written authorisation from the Local Planning Authority.

Within the CEZ:

- No mixing of cement
- No soil/turf stripping, raising/lowering of ground levels (unless advised), deposit or excavation of soil or rubble
- No excavations for services or installation of services
- No storage of materials, machinery fuel, chemicals or other materials of any other description
- No parking/use of tracked or wheeled machinery
- No siting of temporary structures including hard standing areas, portaloos, site huts
- No lighting of fires or disposal of liquids
- Fires on site should be avoided if possible. Where they are unavoidable, they must not be lit in a position where heat could damage foliage or branches. Fires must be a minimum of 20m from the trunk of any retained tree or the centre line of any hedgerow to be retained
- No signs, cables, fixtures or fittings of any other description shall be attached to any part of a retained tree

CONSTRUCTION EXCLUSION ZONE SIGN

CONSTRUCTION EXCLUSION ZONE - NO ENTRY

TREE PROTECTION FENCING

THIS FENCE MUST BE MAINTAINED IN ACCORDANCE WITH THE APPROVED TREE PROTECTION PLANS AND ARBORICULTURAL METHOD STATEMENT FOR THIS DEVELOPMENT.

TREES ENCLOSED BY THIS FENCE ARE PROTECTED BY PLANNING CONDITIONS AND/OR ARE THE SUBJECTS OF A TREE PRESERVATION ORDER.
CONTRAVENTION CAN RESULT IN BREACH OF PLANNING CONDITIONS AND/OR CRIMINAL PROSECUTION.
(TOWN AND COUNTRY PLANNING ACT 1990)

FOR ALL ENQUIRIES REGARDING TREES AT THIS DEVELOPMENT
PLEASE CALL 01386 576161 OR EMAIL ENQUIRIES@BARTON-HYETT.CO.UK

Barton Hyett Associates
Arboricultural Consultants