ARBORICULTURAL IMPACT ASSESSMENT

Land at Bird in Eye Farm, Uckfield

April 2021

Barton Hyett Associates
Arboricultural Consultants

In association with

CSA environmental

Summary table		
Site Name:	Land at Bird in Eye Farm	
Project reference:	C.3574	
Site Address:	South of Bird in Eye Hill, Uckfield	
Nearest Postcode:	TN22 5HA	
Central Grid reference:	TQ 48289 20730	
Local Planning Authority:	Wealden District Council	
Relevant planning policies:	WDC adopted Core Strategy 2013: *WCS12 Biodiversity, WCS13 Green Infrastructure.* WDC Local Plan (1998): *Saved policies: EN8, EN12, EN13, EN14*	
Statutory Controls:	**Tree Preservation Order**	**Conservation Area**
	No	No
Soil Type: **(Source: BGS online soils map © NERC 2021)**	**Superficial/Drift**	**Bedrock**
	None recorded	Lower Tunbridge Wells Sand - Sandstone, Siltstone And Mudstone.
Topographical Survey:	Yes - DRWG ref: 6JJ2-Bird in Eye Farm (PS)	
Notes:	Designated ASNW within, and adjacent to, the site.	
Report author:	Richard Hyett, MSc, BSc (Hons), MArborA, MICFor	
Checked by:	Paul Barton, MSc, BSc, MArborA, AARC	
Date of issue:	7th April 2021	

Arboricultural Association Professional Member

PR: 3525

Institute of Chartered Foresters registered

Barton Hyett Arboricultural Consultants

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1. Instruction

1.1. Barton Hyett Associates Ltd. have been instructed by CSA Environmental on behalf of the applicants, Croudace Homes Limited and Mr and Mrs Berry, to survey trees located on land at Bird in Eye Farm, Uckfield ('the site') in accordance with BS5837:2012 '*Trees in relation to design, demolition and construction - recommendations*'.

1.2. The scope of the instruction was to inspect trees relevant to an outline planning application at the site and provide written advice on how they inform feasibility and design options for the site. The instruction also required an outline 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 to the east of the settlement of Uckfield and south of the B2102 (Bird in Eye Hill). The main site (the primary area of proposed built development) surrounds Bird in Eye Farm. The farm complex currently contains a number of barns and buildings that are utilised by local businesses. Beyond the farm complex is a series of equestrian paddocks (primarily to the south and west). To the east and south east of the farm complex is a field and an area of young establishing woodland. A track leads from the main farm complex to a series of barns located to the far east of the site.

2.2. The southern part of the site (proposed strategic SANG area) is separated from the main site by an east/west orientated belt of woodland. The woodland is designated Ancient Semi Natural Woodland (ASNW) and is known locally as Bird in Eye Shaw. Further ASNW is located along the western boundary of the site (including Nightingale Shaw) as well as long the far south-eastern boundary.

2.3. None of the surveyed trees are protected by Tree Preservation Order, and the site is not located within a designated Conservation Area.

3. Tree Survey Findings

3.1. A total of 8 individual trees, 21 groups of trees, 6 hedgerows and 5 woodlands were identified and surveyed. These are summarised in terms of their quality in accordance with the recommendations of BS5837 below, and shown in more detail on the Tree Survey and Constraints Plan (Section 2) and within the Tree Survey Schedule (Section 4).

	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	**8**	1	4	3	-
Groups	**21**	4	7	10	-
Hedgerows	**6**	-	-	6	-
Woodland	**5**	4	1	-	-
Total	**40**	**9**	**12**	**19**	**0**

Table 1: Summary of arboricultural features of each BS5837 quality category

3.2. The majority of surveyed features were assessed as being of moderate quality (quality category B). Nine features were assessed as being of high quality (quality category A). These are, T6 common ash, G9 English oak, G4, G1, G14 (all of mixed species) and W1, W2, W4 and W5 (all of mixed species).

3.3. Some large areas of young woodland type planting were also identified (G8 and W3) and whilst these are establishing well, they require some management and due to the relatively small size of the trees within them have been assessed as being of moderate quality (quality category B).

3.4. No trees were assessed as being unsuitable for retention (quality category U).

3.5. Tree T6 and both the large oak trees within G9 have been categorised as 'veteran' trees by virtue of their large stem girth and the presence of additional features, e.g. the presence of decay fungi, cavities and retrenching crowns. As such, they are of significance as heritage and ecologically valuable trees and particular importance is placed upon them in national planning policy terms.

3.6. A desktop search of DEFRA's MAGIC online mapping database has revealed a number of areas of ASNW to be present around the periphery of the site (G14, W2, W4, W5,) as well as within the site itself (W1). A full ASNW survey was not undertaken but with the exception of G14 all the designated areas of ASNW have the appearance and some of the characteristics one would expect to observe in Ancient Woodland.

3.7. The National Planning Policy Framework 2019 (NPPF) states that:

'development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused unless there are wholly exceptional reasons, and a suitable compensation strategy exists'.

3.8. Detrimental impacts upon the identified ASNW and veteran trees from proposed development might include, but are not limited to, damage to roots and understorey, damage to or compaction of soil around the tree roots, changes to the water table or drainage within the nearby soil and increased pollution (such as from de-icing salt, garden waste).

3.9. The Forestry Commission and Natural England standing advice '*Ancient woodland, ancient trees and veteran trees: protecting them from development*' is a material planning consideration which is taken into account when making decisions on planning applications. In reaching a planning decision, the LPA should assess the potential impacts, and avoid, mitigate or compensate for identified impacts. A key method of mitigation is the use of a 'buffer zone'. So, in accordance with the standing advice an additional veteran tree buffer zone with a radius of 15 times the diameter of T6 and G9 has been shown on the Tree Survey and Constraints Plan. In addition, an ancient woodland buffer of 15m from the furthest edge of the woodland canopy has been applied.

3.10. The standing advice also states that the inclusion of gardens within a veteran tree or ancient woodland buffer zones should be avoided. Instead the buffers should consist of semi-natural habitats such as woodland or a mix of scrub, grassland, heathland and wetland planting. The area within the buffer zone should be part of the green infrastructure of the area and contribute to wider ecological networks, and only be planted with local and appropriate native species. Access within a buffer should be appropriate, and can be allowed if the habitat is not harmed by trampling. Please refer to the further guidance in section 5.

3.11. The constraint posed by the veteran tree and ancient woodland buffer zones is an important design consideration for the site.

3.12. In this case the proposed development will be able to respect the required buffer zones as well as deliver enhancements through suitable woodland margin planting within the buffer closest to the development (e.g. the north side of W1).

4. Proposed Development

4.1. Outline planning consent is sought for up to 290 dwellings, associated landscaping, informal open space and strategic SANG, with access from the B2102.

4.2. Matters relating to appearance, landscaping, layout and scale are all reserved.

5. Impact Assessment (AIA)

5.1. The AIA considers the effects of any tree loss required to implement the indicative layout design as well as any reasonably foreseeable potentially damaging activities proposed in the vicinity of retained trees. This is undertaken with reference to BS5837:2012 and considering the outline nature of the proposals. This can include tree removal to facilitate design, demolition of buildings and removal of existing hard surfacing, soil compaction in close proximity to trees and direct impact damage to canopy and roots of retained trees from construction activities. A summary of anticipated impacts resulting from the proposed development is provided below.

Tree losses

5.2. The table below provides a summary of the anticipated tree and hedgerow losses that will occur as a result of the proposed development.

	Total (survey items)	**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.**
Trees	**8**	0	0	2
Groups	**21**	0	0	2
Hedgerows	**6**	0	0	0
Woodland	**5**	0	0	4

Table 2: Summary of anticipated arboricultural losses within each BS5837 quality category

5.3. Two individual trees (T3 and T4) and two groups of trees (G3 and G17) are expected to be removed order for the proposed development to be implemented. In addition, up to 15m of hedgerow (approximately 5m of H1 and 12m of H5) will require removal.

5.4. All of the trees, and tree groups, that are likely to be removed are of low-quality with a short estimated useful life expectancy. With this mind, their loss can be readily mitigated through the provision of high quality new tree planting within the area of proposed built development. In addition, the anticipated hedgerow removal can be readily mitigated through the provision new hedgerow planting. In direct mitigation the existing gap within H5 (mid way along its length) could be restocked.

5.5. In summary, the anticipated arboricultural losses will be minimal and have, in my opinion, negligible wider impact. The anticipated losses can be appropriately mitigated. Due to the quality of the vegetation likely to be removed, an overall enhancement in the arboricultural resource at the site could be easily provided.

Anticipated impacts to retained trees

5.6. *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.

5.7. *Facilitation pruning* - It is not anticipated that any facilitation pruning of retained trees will be required in order to allow the proposed development to be implemented.

5.8. *Ground level changes* - Due to the size of the buffers provided to retained trees and woodland, and the location of the of the proposed built development, no ground level changes are required within the RPAs (or buffers) of retained trees.

5.9. *Foundations* - The Illustrative Masterplan demonstrates that the site can accommodate 290 dwelling without the need for any foundations to be constructed within, or close to, the RPAs of retained trees.

5.10. *Hard surfacing* - No extensive areas of hard surfacing are required within the RPAs of retained trees. However the proposed access road as shown on the Illustrative Masterplan marginally encroaches in to the default RPAs associated with G4 (high quality tree group) and T2 (moderate quality individual tree). The majority of this encroachment already exists due to an area of hardstanding storage area with shipping containers. The detailed design of the access road can be prepared in order to reduce or avoid any further encroachment and if the construction of the access road is carefully implemented in line with a detailed AMS then significant impacts to the adjacent trees can be avoided.

5.11. *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 of retained trees within which all services could be located without any arboricultural impacts.

5.12. *Surface water drainage outfall* - the installation of a drainage outfall and piped connection from the detention basin to water course in the south west corner of the main site is required. The outfall will be located within Bird in Eye Shaw, as will part of the piped connection. The route for the connection is primarily located within the area of vegetation that is regularly managed to provide clearance to the existing overhead power lines that run through Bird in Eye Shaw. As such, there is limited woody vegetation located will the piped connection route and none in the vicinity of the outfall headwall. A narrow trench will be required to install the connection and a small number of hazel coppice stools, some small elders and a small downy birch will require removal. The most significant of these are the hazel coppice stools which have been regularly coppiced as part of the overhead line clearance works. From an initial on site assessment, the temporary lifting and replanting of these coppice stools (or their translocation to another position in the vicinity) is feasible and could be undertaken if required. The headwall adjacent the water course will be lightweight in construction and formed from vegetated bag work and there will be very limited excavation (carried out by hand) into the bank of the existing water course.

5.13. *Footpath to strategic SANG* - in order to provide a suitable footpath configuration for the strategic SANG an existing informal footpath through Bird in Eye Shaw (ASNW) will need to be improved. The existing footpath runs from the main site to the northwest corner of the strategic SANG area. The works to improve the footpath will be sensitive to the location. The improvements will include wood chip surfacing retained by timber edging boards held in place with timber pegs. In order to prevent access into the wider ASNW the path will be enclosed with chestnut pail fencing held in place with driven timber posts at appropriate (2-3m) centres. An existing small bridge over the watercourse (See photo 10) will also be replaced with a new lightweight timber bridge. The timber approach to construction will allow the ground and associated flora to be retained with minimal disturbance. The final alignment of the path edging and fence posts will be carefully chosen, and checked on site, in order to avoid any trees, tree roots, understorey and ground flora. The location of all timber posts is flexible and locations will be selected to avoid tree roots or other vegetation. All the works can be carried out by hand without the need for any machinery to enter the woodland. Where necessary, trial holes in each post location will be excavated by hand to ascertain the presence or absence of roots. Alternative locations will be selected if significant roots are encountered. If undertaken appropriately, and in line with an appropriate working methodology all, these works can implemented with no significant impact on the woodland.

5.14. *Strategic SANG maintenance access* - vehicle access to the strategic SANG will be required for maintenance purposes. Although the route of this access (and one of the proposed pedestrian access routes) passes the two veteran trees within G9, it will utilise the existing, well used, concrete and compacted farm access tracks (as can be seen in photo 7). As such, no arboricultural impacts arising from the proposed development are anticipated.

Enhancements

5.15. A series of enhancements to the arboricultural resource of the site can be provided through the delivery of the development. These are summarised in the non-exhaustive list below:

- Extensive woodland margin planting within the ASNW buffer zone to the north of W1 and east of W2. Using appropriate, ecologically valuable tree and shrub species. Including the provision of varied vertical and lateral structure allowing a sinuous margin to be created
- Adapting the management regime of central hedgerow H5 (and restocking of the gap) to be less in tense and allow the hedgerow to develop a larger and fuller form
- Provision of a significant amount of standard tree planting with the main part of the site. Including the planting of specimen street trees and tree planting within pocket parks and GI connections

- Extensive tree and shrub planting across the proposed strategic SANG land
- Proactive management of the young establishing woodlands (G8 and W3) to promote a more diverse species mix and varied structure. Work may include thinning compartments to improve light penetration to the shrub/herb layer and localised restocking.
- Improvements of ground conditions within the buffer zones associated to G9 and T6. Application of any appropriate veteran tree management, if deemed appropriate, to assist in improving condition and prolonging life.

6. Tree Protection Measures

6.1. Tree protection fencing will be utilised to protect adjacent retained trees during the construction phase. At the very minimum the fencing should be positioned in locations that will protect the defined RPAs of retained trees, but where possible the fencing should maximise the protection area around trees and woodland (the Construction Exclusion Zone). The fencing must be to an appropriate standard (e.g to the specification set out in Figure 3 of BS5837:2012). The fencing must also be installed prior to the commencement of any construction work (including enabling works) on site and maintained throughout the entire build period. A Tree Protection Plan has not been produced at the current, outline, stage as any meaningful tree protection measures must be based on an approved, detailed layout. However, based on the Illustrative Masterplan the appropriate protection of retained trees on the site is feasible.

7. Heads of terms for an Arboricultural Method Statement (AMS)

7.1. BS5837:2012 (Figure 1) recommends that detailed/technical design of tree protection and arboricultural methodologies should be resolved and finalised following on from the approval of the feasibility of a scheme by the Local Planning Authority.

7.2. Annex B and Table B.1 of BS5837:2012, an informative, advises that arboricultural method statement 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, in the case of an outline application, a detailed arboricultural method statement might reasonably be required at the reserved matters planning stage.

7.3. In relation to the site, it is anticipated that arboricultural working methods are likely to be quite straightforward. A brief summary of the principles of tree protection on development sites is included in section 7. A draft, 'heads of terms' for an arboricultural method statement is set out below:

- Project arboriculturist – schedule of monitoring and supervision
- Pre-commencement site meeting
- Tree and hedge removals
- Erection of tree protection barriers (and temporary ground protection) as may be required
- Main construction phase - including installation surface water drainage outfall and improvements to existing path within Bird in Eye Shaw
- Removal of tree protection barriers
- Final landscaping including tree planting.

8. Summary and Conclusion

8.1. In my opinion the proposed development is acceptable from an arboricultural perspective. All trees of value can be retained and adequately protected during construction activities to sustain their health and longevity.

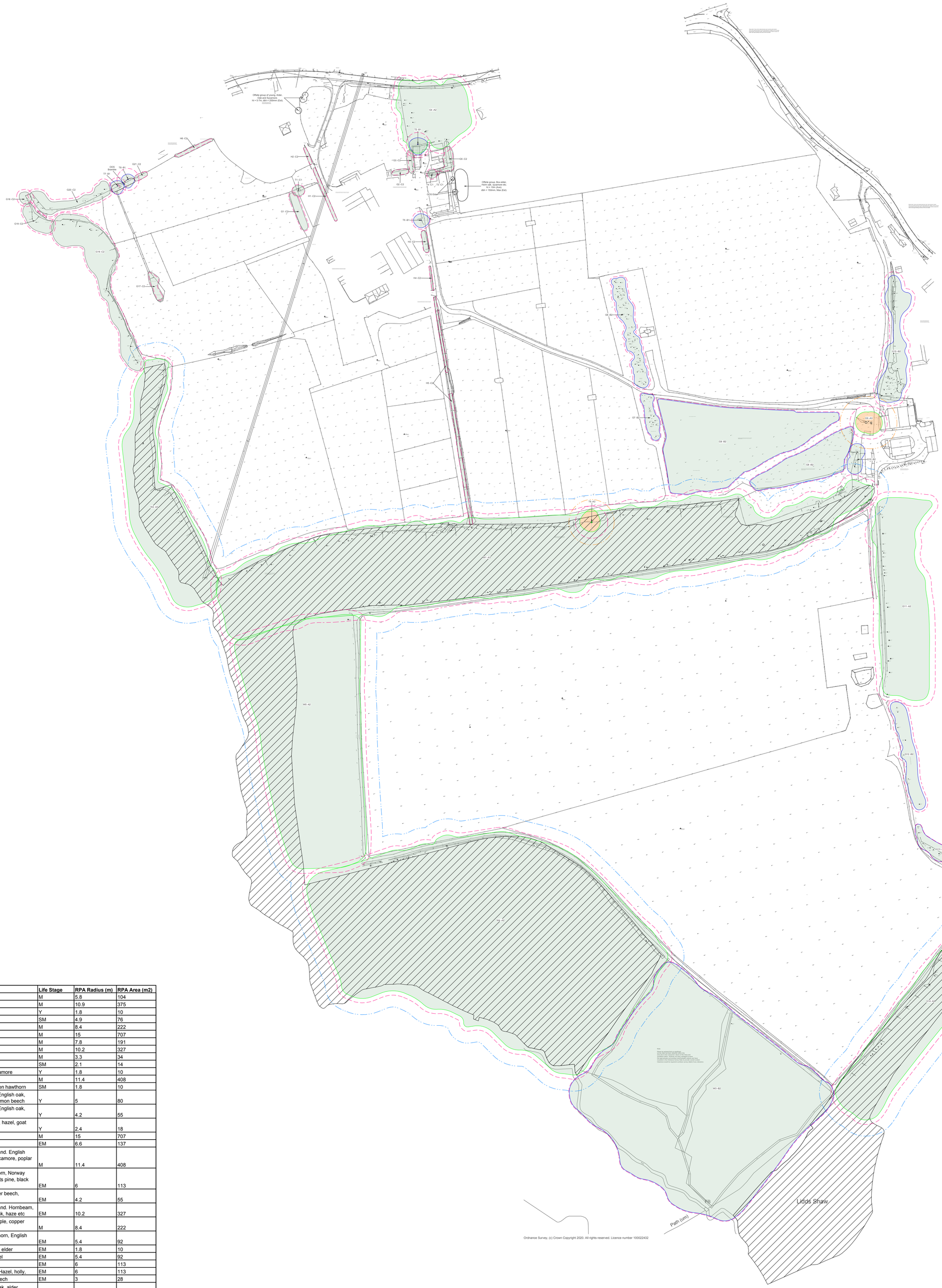
8.2. The required buffers to veteran trees and ASNW have been provided and respected by the proposed development. The proposed margin planting to the ASNW and treatments within the buffers provided will ensure they are effective. Minor potential impacts could arise from the SANG footpath upgrade and the surface water outfall connection, but appropriate mitigation can be be put in place to address these.

8.3. All tree losses will be mitigated through diverse tree/shrub planting which is proposed throughout the main site and the wider strategic SANG area. New trees are likely to have an extended useful life expectancy compared to those which will likely be removed. In addition, significant enhancement planting beyond that required to mitigate the losses will be provided.

8.4. A further arboricultural impact assessment (detailed) as well an arboricultural method statement and finalised tree protection plan will need to be produced. Once the feasibility of a scheme has been agreed by the Local Planning Authority at the outline planning stage, this detail can be secured through the reserved matters process.

8.5. On the basis that the recommendations and advice contained within this report are adhered to, the proposed development is acceptable from an arboricultural perspective.

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



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Tree No	Ht (m)	Species	Life Stage	RPA Radius (m)	RPA Area (m2)
T1	9.5	Goat willow	M	5.8	104
T2	15	English oak	M	10.9	375
T3	5	Sycamore	Y	1.8	10
T4	5.5	Goat willow	SM	4.9	76
T5	13.5	English oak	M	8.4	222
T6	18	Common ash	M	15	707
T7	16	English oak	M	7.8	191
T8	17	English oak	M	10.2	327
G1	4-4.5	Leyland cypress	M	3.3	34
G2	6-8	Leyland cypress	SM	2.1	14
G3	3-6	Common hawthorn, sycamore	Y	1.8	10
G4	8-20	English oak, sycamore	M	11.4	408
G5	4-6	Sycamore, elder, common hawthorn	SM	1.8	10
G6	4-9	Hornbeam, Scots pine, English oak, silver birch, cherry, common beech	Y	5	80
G7	3-11	Hornbeam, Scots pine, English oak, silver birch	Y	4.2	55
G8	4-9	Silver birch, English oak, hazel, goat willow	Y	2.4	18
G9	18-21	English oak	M	15	707
G10	11-14	Hornbeam	EM	6.6	137
G11	10-20	Mixed deciduous woodland. English oak, common beech, sycamore, poplar etc	M	11.4	408
G12	10-20	Mixed woodland, hawthorn, Norway maple, English oak, Scots pine, black pine	EM	6	113
G13	5-9	English oak, holly, copper beech, Norway maple.	EM	4.2	55
G14	6-18	Mixed deciduous woodland. Hornbeam, common ash, English oak, haze etc	EM	10.2	327
G15	12-18	English oak, Norway maple, copper beech, common ash	M	8.4	222
G16	4-9	Alder, goat willow, hawthorn, English oak	EM	5.4	92
G17	3-4.5	Common hawthorn, oak, elder	EM	1.8	10
G18	6-7	Common hawthorn, hazel	EM	5.4	92
G19	6-9	Hazel, holly and oak	EM	6	113
G20	5-12	Common ash, common Hazel, holly,	EM	6	113
G21	5-9	Holly, elder, common beech	EM	3	28
W1	6-20	Common ash, English oak, alder, hazel, elder, goat willow, sycamore, silver birch.	M	9	255
W2	4-17	Common ash, English oak, alder, hazel, elder, goat willow, sycamore, silver birch, holly.	M	7.8	191
W3	4-10	English oak, silver birch, hazel	Y	3	28
W4	4-18	English oak, common ash, hazel, common beech, hornbeam	M	9	255
W5	6-20	English oak, common ash, hazel, common beech, hornbeam, sweet chestnut, larch	M	8.4	222
H1	3	Common hawthorn, sycamore, elder.	M	1.3	5
H2	1.5	Common hawthorn, elder	M	1	3
H3	5	Common hawthorn, blackthorn	M	2.4	18
H4	2	Sycamore, elder, common hawthorn	M	1.3	5
H5	1.8	Common hawthorn, blackthorn	EM	1	3
H6	2	Hazel, blackthorn, bramble	EM	1	3

TS - 'Section 2'

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

Statutory Protection

- Ancient Semi Natural Woodland
- Ancient Semi Natural Woodland buffer

N
GRID NORTH

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

PROJECT TITLE
Bird in Eye Farm, Uckfield (C.3574)

DRAWING TITLE
Tree Survey & Constraints Plan

SCALE	DRAWING NUMBER
1:2000 @ A1	BHA_741_01

DRAWN BY	APPROVED BY	REVISION	SHEET	DATE
SD	RH	A	-	12/05/2020

LAYOUT USED WITHIN DRAWING **n/a**

CLIENT **Croudace Homes Ltd and Mr & Mrs Berry**

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

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TRR - 'Section 3'

KEY

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- Category B - Hedgerow, Group, Woodland - Moderate quality (Retention desirable)
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- Shrub mass/offsite tree/out of scope (OOS)
- Trees, groups and hedgerows anticipated to require removal in order for the of proposed development to be implemented.

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- Ancient Semi Natural Woodland
- Ancient Semi Natural Woodland buffer
- Tree Preservation Order (TPO): Trees under statutory protection. No tree works to be undertaken without specific consent or by relevant exception

0 20 40 60 80 100
Metres

N
GRID NORTH

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

PROJECT TITLE
Bird in Eye Farm, Uckfield (C.3574)

DRAWING TITLE
Indicative Tree Retention & Removal Plan

SCALE	DRAWING NUMBER
1:2000 @ A1	BHA_741_02

DRAWN BY	APPROVED BY	REVISION	SHEET	DATE
SD	RH	-	-	08/04/2021

LAYOUT USED WITHIN DRAWING **2646_114_H_Landscape Strategy & SANG design_no text**

CLIENT **Croudace Homes Ltd and Mr & Mrs Berry**

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

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BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

SURVEYOR: RICHARD HYETT

CLIENT: CROUDACE HOMES LTD AND MR AND MRS BERRY

SURVEY DATE: 29 APRIL 2020

INDIVIDUAL TREES

Ref	Species	On / off site	Height (m)	No. of Stems	Est diam?	Calc. / Actual Stem Dia. (mm)	Crown radii (m) N-E-S-W	Avg. Canopy Height (m)	1st branch ht (m)	1st branch dir.	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	RPA m²	Veteran Tree/ ASNW Buffer radius (m)	TPO?
T1	Goat willow	On	10	1	#	480	5-6-5-6	2.5	1.5	W	M	None	Adjacent ménage. Pollarded at 4m in past. Typical for species and age.	Good	Fair	20+	C1	5.8	104	-	No
T2	English oak	On	15	1	-	910	6-9-10-8	5.0	3	E	M	None	On woodland edge. Adjacent container storage area and hard standing. Crown lifted on south side in past.	Good	Fair	40+	B1	10.9	375	-	No
T3	Sycamore	On	5.0	1	#	150	3-2-2.5-0.5	1.5	1	E	Y	None	Self down on spoil bank	Fair	Fair	10+	C1	1.8	10	-	No
T4	Goat willow	On	5.5	11	#	410	4-5-4-4	1.0	1.2	W	SM	None	Multi stemmed. On spoil bank. Adjacent storage containers.m	Good	Fair	20+	C1	4.9	76	-	No
T5	English oak	Off	13.5	1	#	700	6-8-7-7	4.5	4.5	W	M	None	Offsite oak adjacent proposed strategic SANG land. Ivy on stem. Typical for species and age.	Good	Fair	40+	B1	8.4	222	-	No
T6	Common ash	On	18.0	1	#	1400	12-8-9-11	8.0	5	SE	M	Veteran	Very large tree. Split out lower limb at base. Hollowing stem, deadwood, branch tear wounds, decay fungi (innonotus hispidus). Apply veteran tree buffer.	Good	Fair	40+	A3	15.0	707	21	No
T7	English oak	Off	16.0	1	#	650	5-6-8-7	4.0	5	SW	M	None	Garden tree. No access to stem	Good	Fair	20+	B1	7.8	191	-	No
T8	English oak	Off	17.0	1	#	850	5-6-8-6	6.0	5.5	S	M	None	Garden tree. No access to stem. Dense Ivy on stem	Good	Fair	20+	B1	10.2	327	-	No

BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

SURVEYOR: RICHARD HYETT

CLIENT: CROUDACE HOMES LTD AND MR AND MRS BERRY

SURVEY DATE: 29 APRIL 2020

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. Canopy Height (m)	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran Tree/ASNW Buffer radius (m)	TPO?
G1	Leyland cypress	On	4-4.5	25	#	275	2.5	0.2	M	None	Topped screen/shelter belt to ménage	Good	Fair	20+	C2	3.3	-	No
G2	Leyland cypress	On	6-8	15	#	175	2.5	0.5	SM	None	Linear tree belt. Typical for species and age.	Good	Fair	40+	C2	2.1	-	No
G3	Common hawthorn, sycamore	On	3-6	15 approx	#	150	3	1.2	Y	None	Unmaintained hedge group. Ivy dominates in parts. Bramble throughout.	Fair	Fair	20+	C2	1.8	-	No
G4	English oak, sycamore	Off	8-20	50	#	950	7	3.0	M	None	Established woodland group. Prominent from adjacent highway and in surrounding landscape. Hawthorn and elder understorey. Bluebells present. Low crown over site. No access into woodland.	Good	Good	40+	A2	11.4	-	No
G5	Sycamore, elder, common hawthorn	On	4-6	15 Approx	#	150	2.5	1.5	SM	None	Dense boundary group. Adjacent soil bund. No access to stems.	Fair	Fair	20+	C2	1.8	-	No
G6	Hornbeam, Scots pine, English oak, silver birch, cherry, common beech	On	4-9	50	#	420	3.5	1.5	Y	None	Establishing linear tree belt. Some poor and drawn up specimens within group. Pines establishing well.	Good	Fair	40+	B	5.0	-	No
G7	Hornbeam, Scots pine, English oak, silver birch	On	3-11	25	#	350	3.5	1.5	Y	None	Establishing linear tree belt. Some poor and drawn up specimens within group. Pines establishing well. Larger oak at southern end. Single dead tree in middle.	Good	Fair	40+	B2	4.2	-	No
G8	Silver birch, English oak, hazel, goat willow	On	4-9	100	#	200	1.75	0.5	Y	None	Establishing block planted young woodland. Requires some management. Squirrel damage on some trees.	Good	Fair	40+	B2	2.4	-	No

BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

SURVEYOR: RICHARD HYETT

CLIENT: CROUDACE HOMES LTD AND MR AND MRS BERRY

SURVEY DATE: 29 APRIL 2020

Ref	Species	On / off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. Canopy Height (m)	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran Tree/ASNW Buffer radius (m)	TPO?
G9	English oak	Off	18-21	3	-	1590	9	5.0	M	Veteran	Two oaks are of veteran status. Large stem diameter, deadwood, cavities, decay pockets, Ivy on stem, branch tear out scars. Ash between the two oaks is not veteran. Apply veteran tree buffer to oaks.	Good	Fair	40+	A3	15.0	24	No
G10	Hornbeam	On	11-14	5	#	550	5	2.5	EM	None	Linear group of trees. Ivy dominates some stems. To rear of small barn. Hardcore tipped close to base in past.	Good	Fair	20+	B2	6.6	-	No
G11	Mixed deciduous woodland. English oak, common beech, sycamore, poplar etc	Off	10-20	100	#	950	6	3.0	M	None	Mixed deciduous woodland. No access.	Good	Fair	40+	A2	11.4	-	No
G12	Mixed woodland, hawthorn, Norway maple, English oak, Scots pine, black pine	Off	10-20	100	#	500	4	4.0	EM	None	Mixed woodland. No access. Some larger veteran oaks of up to circa 1000mm Dbh present.	Good	Fair	40+	B2	6.0	-	No
G13	English oak, holly, copper beech, Norway maple.	On	5-9	50	-	350	4	2.0	EM	None	Linear tree group with understorey of hawthorn, Leyland cypress and hazel	Fair	Fair	40+	B2	4.2	-	No

BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

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CLIENT: CROUDACE HOMES LTD AND MR AND MRS BERRY

SURVEY DATE: 29 APRIL 2020

Ref	Species	On / off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. Canopy Height (m)	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran Tree/ASNW Buffer radius (m)	TPO?
G14	Mixed deciduous woodland. Hornbeam, common ash, English oak, haze etc	Off	6-18	100	#	850	6	3.0	EM	ASNW	Linear woodland belt with good structure. Blue bells present. No access for detailed assessment.	Good	Fair	40+	A2	10.2	15	No
G15	English oak, Norway maple, copper beech, common ash	Off	12-18	50 Approx	-	700	5	4.0	M	None	Linear tree belt with residential properties beyond. No access to stems.	Good	Fair	40+	B2	8.4	-	No
G16	Alder, goat willow, hawthorn, English oak	Off	4-9	75	-	450	4	3.5	EM	None	Linear woodland along water course. Some alder in decline. Wild garlic present.	Fair	Fair	20+	C2	5.4	-	No
G17	Common hawthorn, oak, elder	On	3-4.5	6	#	150	2.5	0.2	EM	None	Small isolated group in centre of paddock, bramble at base.	Good	Fair	20+	C2	1.8	-	No
G18	Common hawthorn, hazel	Off	6-7	2	#	450	3	1.5	EM	None	No access to stems. Dbh equivalent estimated. Coppice form. Adjacent existing gate and trackway. Low crown over track.	Fair	Fair	20+	C2	5.4	-	No
G19	Hazel, holly and oak	Off	6-9	25 approx	#	500	4.5	3.0	EM	None	No access to stems. Dbh equivalent estimated. Coppice form.	Fair	Fair	20+	C2	6.0	-	No
G20	Common ash, common Hazel, holly,	Off	5-12	25 Approx	#	500	4	4.0	EM	None	No access to stems. Dbh equivalent estimated. Coppice form. Some trees may be in adjacent garden. Recent pruning work undertaken. Ash has significant bacterial canker elisions.	Fair	Fair	20+	C2	6.0	-	No

BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

SURVEYOR: RICHARD HYETT

CLIENT: CROUDACE HOMES LTD AND MR AND MRS BERRY

SURVEY DATE: 29 APRIL 2020

Ref	Species	On / off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. Canopy Height (m)	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran Tree/ASNW Buffer radius (m)	TPO?
G21	Holly, elder, common beech	Off	5-9	5	#	250	3	4.0	EM	None	Within dense bramble, no access to stems.	Fair	Fair	20+	C2	3.0	-	No

HEDGEROWS

Ref	Species	On / off site	Av. Height (m)	Av. width (m)	Av. Stem diam (mm)	Avg. Canopy Height (m)	Life Stage	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)
H1	Common hawthorn, sycamore, elder.	On	3	3.0	100	0.2	M	Box cut with flail. Ivy dominates. On slight bank.	Good	Fair	20+	C2	1.3
H2	Common hawthorn, elder	On	2	2.0	75	0.0	M	Box cut with flail. Ivy dominates. On slight bank.	Fair	Fair	20+	C2	1.0
H3	Common hawthorn, blackthorn	On	5.0	4.0	200	0.2	M	Adjacent track and storage area. Side flailed on track side.	Good	Fair	20+	C2	2.4
H4	Sycamore, elder, common hawthorn	On	2.0	2.5	100	0.2	M	Maintained with flail. Ivy dominates in parts.	Good	Fair	20+	C2	1.3
H5	Common hawthorn, blackthorn	On	1.8	1.5	75	0.0	EM	Box cut with flail. Slight ditch on east side.	Good	Fair	20+	C2	1.0
H6	Hazel, blackthorn, bramble	Off	2.0	3.0	80	0.0	EM	Box cut. Boundary hedge to garden. Bramble dominates in parts.	Fair	Fair	20+	C2	1.0

BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

SURVEYOR: RICHARD HYETT

CLIENT: CROUDACE HOMES LTD AND MR AND MRS BERRY

SURVEY DATE: 29 APRIL 2020

WOODLAND

Ref	Species	On / off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. Canopy Height (m)	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran Tree/ASNW Buffer radius (m)	TPO?
W1	Common ash, English oak, alder, hazel, elder, goat willow, sycamore, silver birch.	On	6-20	50	#	750	4	7.0	M	ASNW	Linear woodland along water course. Predominantly ash at eastern end, no obvious signs of ash die back at present. Predominantly alder at western end. Small lake in centre. Ash on south side appear younger and have drawn up form. Bluebells present. Mature hazel coppice on northern edge.	Good	Fair	40+	A3	9.0	15	No
W2	Common ash, English oak, alder, hazel, elder, goat willow, sycamore, silver birch, holly.	Off	4-17	500	#	650	4.5	2.0	M	ASNW	Mixed deciduous woodland. water course at centre. Blue bells and wild garlic present. Evidence of historic coppicing.	Good	Fair	40+	A3	7.8	15	No
W3	English oak, silver birch, hazel	On	4-10	500	-	250	2.5	2.0	Y	None	Predominantly oak plantation. Occasional larger oak up to 750mm Dbh some larger birch also. Brashed up recently but would benefit from management e.g. thinning and understorey panting. Compartment of Alder to south.	Fair	Fair	40+	B2	3.0	-	No
W4	English oak, common ash, hazel, common beech, hornbeam	Off	4-18	500	-	750	5	5.0	M	ASNW	Varied structure mixed deciduous woodland. Proliferation of bluebells present. Some rhododendron present. Occasional old ash coppice stool with significant new growth on site boundary.	Good	Fair	40+	A2	9.0	15	No

BS5837:2102 TREE SURVEY SCHEDULE

BIRD IN EYE FARM, UCKFIELD

PROJECT NO: C.3574

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SURVEY DATE: 29 APRIL 2020

Ref	Species	On / off site	Height range (m)	No. of trees	Est diam?	Max stem diam (mm)	Av. Crown radius (m)	Avg. Canopy Height (m)	Life Stage	Special importance	General Observations	Health & vitality	Struct. cond.	Estimated Remaining Contribution (Years)	BS5837 Category	RPA Radius (m)	Veteran Tree/ASNW Buffer radius (m)	TPO?
W5	English oak, common ash, hazel, common beech, hornbeam, sweet chestnut, larch	Off	6-20	500	-	700	4	5.0	M	None	Varied structure mixed deciduous and coniferous woodland. Proliferation of bluebells present. Occasional old ash coppice stool with significant new growth on site boundary.	Good	Fair	40+	A2	8.4	-	No

PHOTO 1: Looking north-east towards high quality tree goo (G4). This group is located adjacent to the site and Bird in Eye Hill.

PHOTO 2: Looking north towards T2 (moderate-quality) showing the existing hard standing and container storage area.

PHOTO 3: Looking east towards T4 (low-quality), showing the nature of the vegetation in the storage area at the farm complex.

PHOTO 4: Looking south along the east side of hedgerow H5 (low-quality). The hedgerow has been tightly maintained in the past but could be enhanced through changing the management regime.

PHOTO 5: Looking north along the west side of G6 (moderate-quality) showing the typical nature of G6. This group is located on there eastern edge the main site.

PHOTO 6: A view within G8. This group is an establishing young woodland that is predominantly formed from English oak. The area would benefit from some woodland management e.g. thinning.

PHOTO 7: Looking south towards G9 (high-quality). G9 is primarily formed of two close grown English oaks that have both been assigned 'Veteran' status.

PHOTO 8: Looking south-east towards the easternmost point of the proposed strategic SANG land. G13 is located to the left of frame. G14 is located in the background. The image shows a typical access track around the land.

PHOTO 9: Showing the interior of the establishing young woodland W3. The occasional mature standard tree is present within the woodland. An existing access track is also present around the woodland.

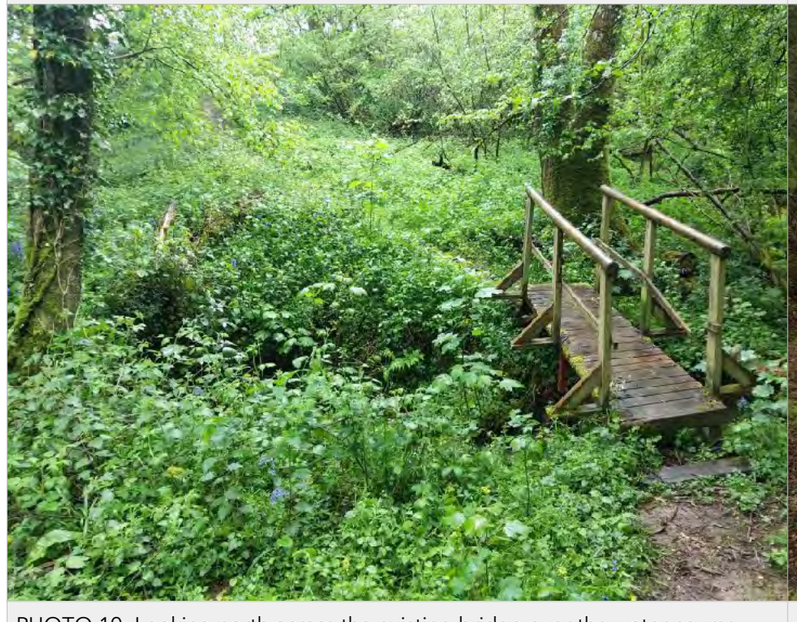

PHOTO 10: Looking north across the existing bridge over the water course within woodland W1 (high-quality). W1 is designated ASNW.

PHOTO 11: Looking west along the northern edge of W1 (high-quality, designated ASNW). The image shows the typical nature of the poorly graded woodland margin and its relationship to the main part of the site.

PHOTO 12: looking north along the eastern edge W2 (high-quality, designated ASNW). The image shows the typical nature of the poorly graded woodland margin and its relationship to the main part of the site.

TREE SURVEY METHODOLOGY

- The tree survey was carried out with reference to the methodology set out in BS5837:2012 '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 (eg 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/woodlands were also surveyed as individuals
- The full tree survey findings are recorded in the following tree survey schedule.
- 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.

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 RPA.) "m-s" = Multi-stemmed.
- STEM DIAMETER (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. (A notional diameter may be estimated where measurement is not possible.)
- HEIGHT, are measured in metres. They are recorded to the nearest half metre for dimensions up to 10m and to the nearest whole metre for dimensions over 10m.
- The CROWN SPREAD are taken at the four cardinal points to derive an accurate representation of the tree crown. They are 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 are expressed both as existing height above ground level of first significant branch along with its direction of growth (eg 2.5m-N), and also in terms of the overall canopy. 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, due to inaccessibility for example, 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 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 upon the local landscape & environment. Semi-Mature (still capable of being transplanted without preparation, up to 30cm 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 upon the local landscape & 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 & 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 of epicormic shoot growth)
Poor: Significant stress or disease noted; larger areas of dieback than above
Dead: (or Moribund)

STRUCTURAL CONDITION:

Defects affecting the structural stability of the tree, including decay, significant dead wood, 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 defect(s) likely to lead to actual failure in the medium to long-term
Dead: (or Moribund)

REMAINING USEFUL LIFE EXPECTANCY:

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

Barton Hyett
Arboricultural Consultants

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.

QUALITY CATEGORY:

Trees are classed as category U, A, B or C, based on criteria given in BS5837:2012; summary definitions as follows (see BS5837 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:

(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 U: UNSUITABLE:

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.

It may also include trees that should be removed irrespective of any development proposals.)

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 highly 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 numbers 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: MINOR VALUE:

Trees or groups of rather low quality, although potentially capable of retention for at least approx. 10 years. Also small trees with stems below 15cm diameter.

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

C1: Unremarkable trees of very limited merit or of 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 benefit.

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 stem diameter measured at 1.5m above ground level, but the shape of the RPA may be altered where site conditions dictate that there are sound reasons to do so.

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 2019 (NPPF paragraph 175) states that:

'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 an
'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.'

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.

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.

PRINCIPLES FOR TREE PROTECTION ON DEVELOPMENT SITES

Barton Hyett
Arboricultural Consultants

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, teleporters, 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