



ARBORICULTURAL SURVEY REPORT

Heath Road Solar Farm

May 2025



Barton Hyett Associates
Arboricultural Consultants

Summary table		
Site Name:	Heath Road Solar Farm	
Project reference:	4924	
Site Address:	Merrylees Road, Newbold Verdon, Leicestershire,	
Nearest Postcode:	LE9 9NR	
Central Grid reference:	SK 45422 05671	
Local Planning Authority:	Hinckley and Bosworth Borough Council	
Relevant planning policies:	Site Allocations and Development Management Policies DPD 2006 to 2026: DM2 - Delivering Renewable Energy and Low Carbon Development; DM4 - Safeguarding the Countryside and Settlement Separation; DM6 - Enhancement of Biodiversity and Geological Interest; DM7 - Preventing Pollution and Flooding.	
Statutory Controls:	Tree Preservation Order	Conservation Area
	None	No
Soil Type: (Source: BGS online soils map © NERC 2023)	Superficial/Drift	Bedrock
	Deep loam to clayey loam, with (northern field and stream valley) clayey loam to silty loam and sand to sandy loam.	Edwalton Member - Mudstone
Topographical Survey:	Topographical Survey (230429 Heath Road-A1-L-TOPO-002-Plan)	
Report author:	Ian Monger <i>BSc (Hons), MSc, MICFor, MArborA</i>	
Date of first issue:	01.08.2023	
Revision:	14.05.2025 to include highway cable connection route	

REPORT CONTENTS:

SECTION 1:	TREE SURVEY & SITE IMAGES
SECTION 2:	TREE SURVEY & CONSTRAINTS PLAN
SECTION 3:	TREE SURVEY SCHEDULE
SECTION 4:	METHODOLOGY
SECTION 5:	DESIGN GUIDANCE AND GENERIC ADVICE

THIS REPORT HAS BEEN PREPARED TO PROVIDE ADVICE AND GUIDANCE ON THE POTENTIAL FOR DEVELOPMENT OF LAND IN RELATION TO TREES. IT IS THEREFORE INTENDED FOR 'INTERNAL USE' ONLY BY THE NAMED CLIENT AND DESIGN TEAM. IT MAY NOT THEREFORE BE SUITABLE FOR SUBMISSION TO A PLANNING AUTHORITY WITH A PLANNING APPLICATION.

1. INSTRUCTION

- 1.1. Barton Hyett Associates Ltd has been instructed by DWD on behalf of Renewable Connections Development Ltd to survey trees located at Heath Road Solar Farm ('the site') in accordance with the recommendations of British Standard 5837:2012 'Trees in relation to design, demolition and construction - recommendations'.
- 1.2. The scope of the instruction was to inspect trees relevant to a planning application for a proposed solar farm at the site, along with cable connection route options along Heath Road to the east and northwest and Merrylees Road to the southeast. The aim is to provide written advice on how they inform feasibility and design options. This report is intended for use by the applicant and design team only and is not for submission to the Local Planning Authority (LPA).

2. SITE DESCRIPTION

- 2.1. The site is three arable fields located between Heath Road to the north and Merrylees Road to the south, approximately 1.5 miles southeast of the village of Bagworth and 8 miles west of Leicester. The approximate survey area, including the cable connection routes along the highways, is shown edged yellow in Figure 1.
- 2.2. The site has a surfaced track access from Heath Road to the north, shared with a poultry farm located to the immediate west of the site.
- 2.3. The surrounding area is rural and predominantly arable fields with scattered pasture fields. To the north of the site and Heath Road is Bagworth Heath Woods, a 75-hectare country park on the location of a former Colliery. To the northeast of the site and adjoining Bagworth Heath Woods is the site of a former brickworks that remains in industrial use.
- 2.4. Public footpath S14/1 runs east to west across the site between the northern field and the two southern fields.
- 2.5. The site level undulates and falls from 145m AOD in the northwestern corner of the northern field, towards the east and south, to about 125m AOD in the southeastern and southwestern corners of the southern fields. A stream flows southwards along the western boundary of the southwestern field.

3. TREE SURVEY FINDINGS

- 3.1. The survey recorded 121 arboricultural features. These are summarised in terms of quality in accordance with the recommendations of BS 5837 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 3**).
- 3.2. The tree survey of the main site was carried out in July 2023. A further site visit was made in March 2025 to survey trees along the potential eastern cable routes of Heath Road and Merrylees Road. The survey of the highway cable connection routes is a high-level survey focused on features of most significance, such as trees of high quality and those with the greatest potential of being impacted.

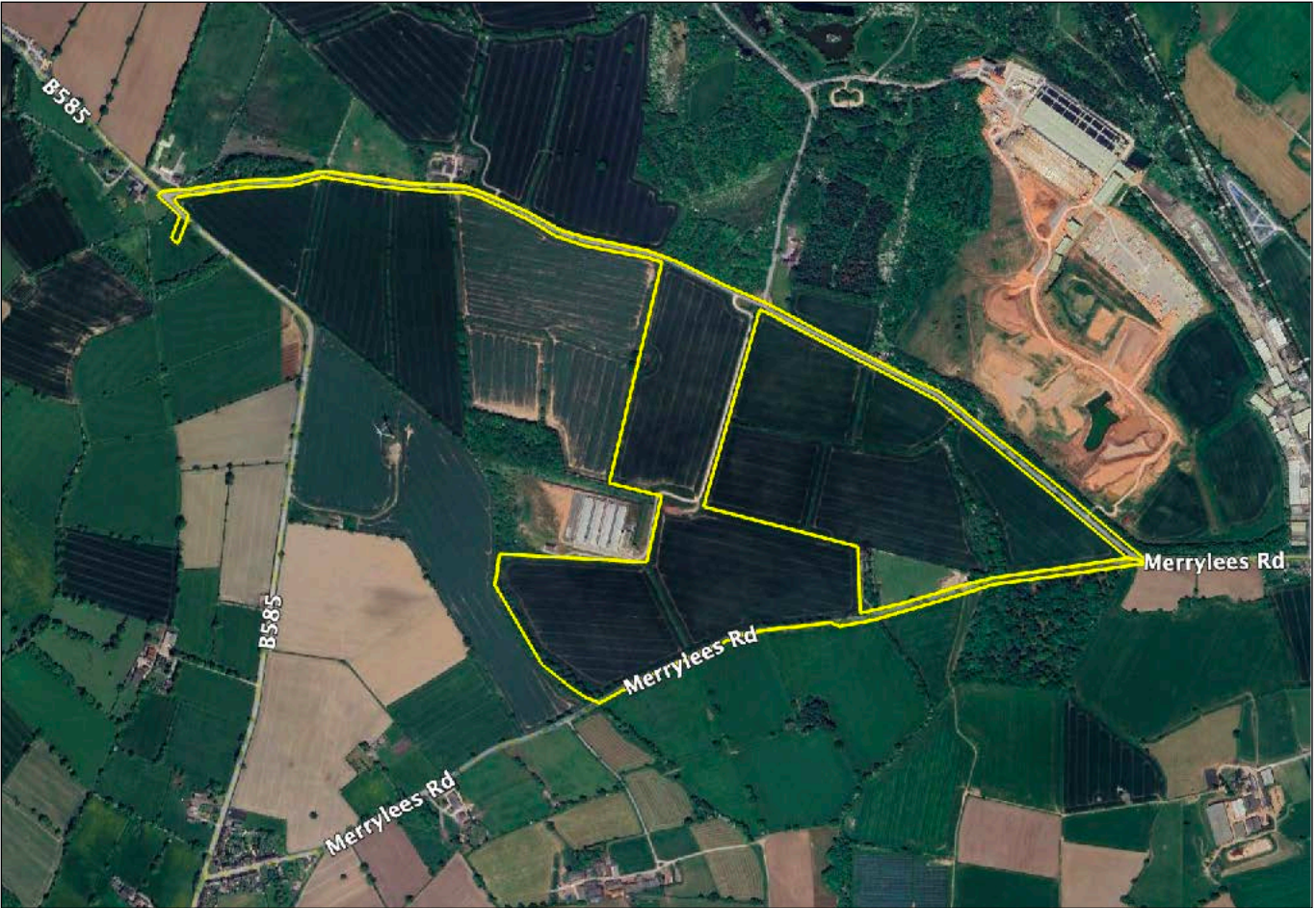


Figure 1: Approximate survey area edged yellow.

Table 1: arboricultural features by type and 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	55	6	28	19	2
Groups	25	2	5	18	-
Woodlands	5	2	3	-	-
Hedgerows	36	-	-	36	-
Total	121	10	36	73	2

4. KEY ARBORICULTURAL FEATURES

- 4.1. No ancient or veteran trees were identified in this survey. There is no ancient woodland affecting the site.
- 4.2. None of the surveyed trees are protected by Tree Preservation Order (TPO) and the site is not within a Conservation Area.
- 4.3. High-quality ash and willow woodlands line the stream channel along the western boundary of the southwestern field and are surveyed as groups G18 and G19 and woodland W2 (A2).
- 4.4. English oaks T14, T23, T30 and T31 are mature field boundary trees of high quality. Mature oak T44 and ash T51 were identified as high-quality off-site trees along Merrylees Road.
- 4.5. There is a pond located within the northern field, close to its western boundary, where a group of three mature oaks G7 (B2) grow with a hawthorn and gorse understorey.
- 4.6. To the north of Heath Road, semi-mature broadleaved woodland W1 (B2) is presumably associated with the restoration of the former colliery. Woodland W3 (B2) to the west is older and appears on the 1866 map of the area. Woodland W5 (A2) is known as Great Fox Covert is located to the south of Merrylees Road near the junction with Heath Road. It is high-quality oak and birch woodland, with common ash, hawthorn and holly.
- 4.7. Two mature ash trees, T21 and T32, are dead/dying trees which can be removed regardless of development proposals. Ash T21 is located well away from people and so the risk is extremely low. It could be retained for the time being to provide standing deadwood habitat. However, ash T32 is located next to the highway. Although the frequency of vehicles and pedestrians along the road is relatively low, and so the risk is also relatively low, a dead roadside tree such as this would usually be removed as part of general farm management.
- 4.8. Hedgerows within the site and along the highway edges are of relatively low woody species diversity but show evidence of historical laying. The roadside hedgerows are generally separated from the carriageway by deep ditches.

5. CONSTRAINTS AND OPPORTUNITIES

- 5.1. All of the recorded arboricultural features, except a few young trees and shrubs at the pond, are located along the field boundaries. The intensive ploughing of the fields over many years will have restricted tree root system growth within the upper soil layers of the fields. Therefore, there are very few arboricultural constraints for a solar farm development at the site.
- 5.2. Nonetheless, the Root Protection Areas (RPAs) of high and moderate-quality trees and tree groups should be respected and maintained free of development, including ground level changes, access roads, hard surfacing, cable routes and service runs.
- 5.3. Utilising the existing field accesses will reduce the requirement for hedgerow removal.
- 5.4. It is important to consider the future growth potential of the trees at the site in order to allow for the potential for shading and encroachment from tree canopies and how this may impact the site in the future. This will help avoid post-development pressure for tree pruning or felling.

- 5.5. There is a good opportunity to delivery a net gain in tree canopy cover and tree species diversity at the site where this will not interfere with the future functioning of the solar farm. Suitable planting alongside existing features, new boundaries and establishing new wildlife corridors to link existing streams or woodland would help with improving biodiversity and connectivity.
- 5.6. The removal of short hedgerow sections for installation of the cable route(s) to the highway, such as hedgerows H24 or H30 will be a straightforward matter and can be easily replanted on completion. Another approach could be to coppice and lift the existing hedgerow section(s) and replant them in their original positions once the cable is installed, thereby retaining an element of their maturity. Care would need to be taken to protect and water the removed sections until they are returned into place, so a method statement for the work would need to be devised.
- 5.7. It is understood that the cable connection(s) will run along the carriageway. This is by far the preferred option as it avoids excavation within the RPAs of trees within the verges. The soil below the surfaced carriageways is less hospitable for tree root growth, and the deep roadside ditches in some locations and wide verges mean that only fine roots are likely to be present beneath the road surfaces.
- 5.8. Where it is unavoidable to install the cable within verges, the recommendations of Streetworks (formerly National Joint Utilities Group - NJUG) Volume 4 Guidelines for the planning, installation and maintenance of utility apparatus in proximity to trees¹ should be followed. The 'prohibited zones' near to trees must be avoided altogether, with trenchless (such as percussive boring) or broken trench techniques utilised within the 'precautionary zones' to avoid tree root systems altogether or expose and retain tree roots greater than 25mm diameter in situ.
- 5.9. The RPAs of trees near the points of cable egress from the site, such as moderate-quality oak T19 in the north and high-quality oak T44 in the south, should be avoided.
- 5.10. The solution for passing the cable across the stream bridge between ash T51 and woodland W5 on Merrylees Road should be reviewed to check that impacts on trees can be avoided or minimised.
- 5.11. Please see **Section 5** for further advice and guidance on designing new developments near trees.

6. CONCLUSION AND RECOMMENDATIONS

- 6.1. The information contained within this report should be used in the preparation of design proposals to minimise negative impacts on and maximise the benefits of the arboricultural assets on this site.
- 6.2. The peripheral locations of the trees and hedgerows within the solar site mean that there are few arboricultural constraints to development. Routing the cable connection(s) within the carriageways rather than verges will avoid significant negative impacts on the roadside trees.
- 6.3. Once the design proposal has been agreed upon, an Arboricultural Impact Assessment report should be prepared for submission to the LPA for the planning application to be validated and to provide the LPA with sufficient information in order to determine the application.
- 6.4. I would be pleased to provide comments and advice on the emerging design proposals before drafts are finalised.

¹ Available at: <https://streetworks.org.uk/resources/publications/>



IMAGE 1: View looking north of the northwest corner.



IMAGE 2: View looking west along the northern boundary showing category C ash tree T20.



IMAGE 3: View looking east showing T21, a dead ash in the corner of the site (category U).

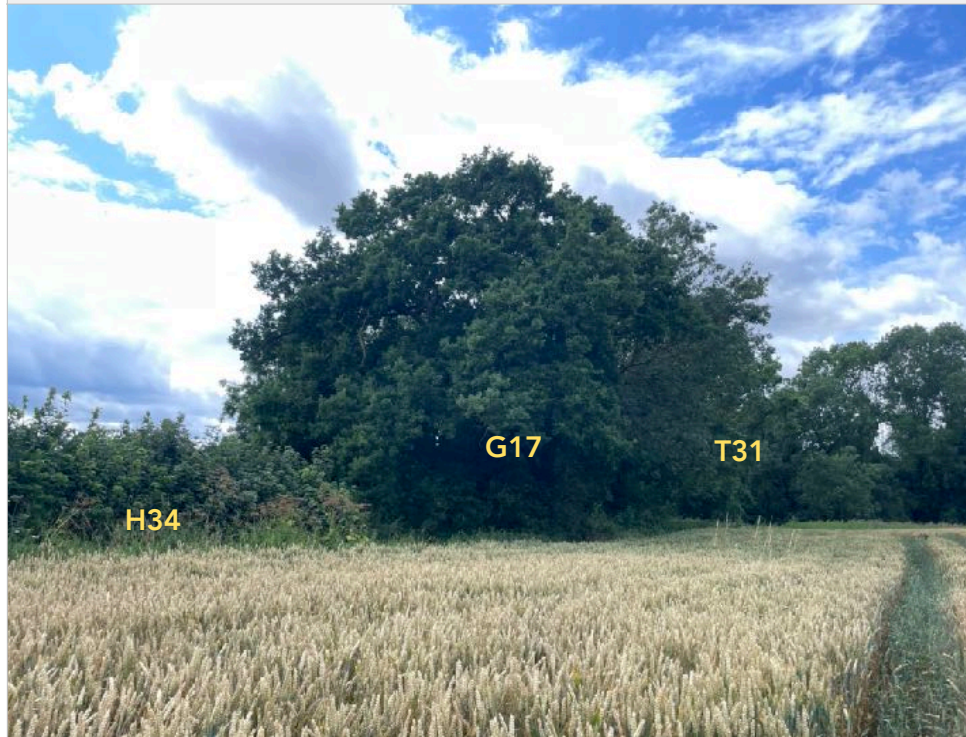


IMAGE 4: View looking south showing along the southern boundary showing the category B group of ash & English oak (G17).



IMAGE 5: View looking northwest along the western boundary showing category A tree groups G18 & G19 as well as category U T32.



IMAGE 6: View looking west along the western boundary showing category A tree group G19 and category C T33.



IMAGE 7: View looking west at the collection of moderate-quality English oak's.



IMAGE 8: View looking south of the pond in the northern field. A small oak is located within the centre (T6).

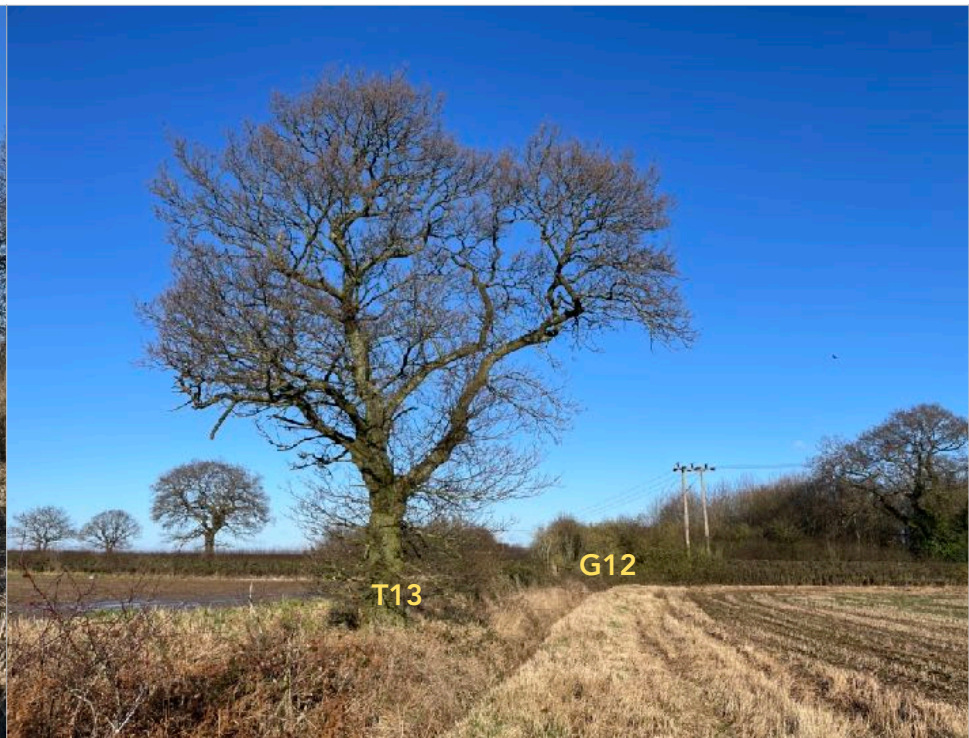


IMAGE 9: View looking north showing moderate quality English oak close to the northern boundary.



IMAGE 10: View of the northern boundary with category A T14.

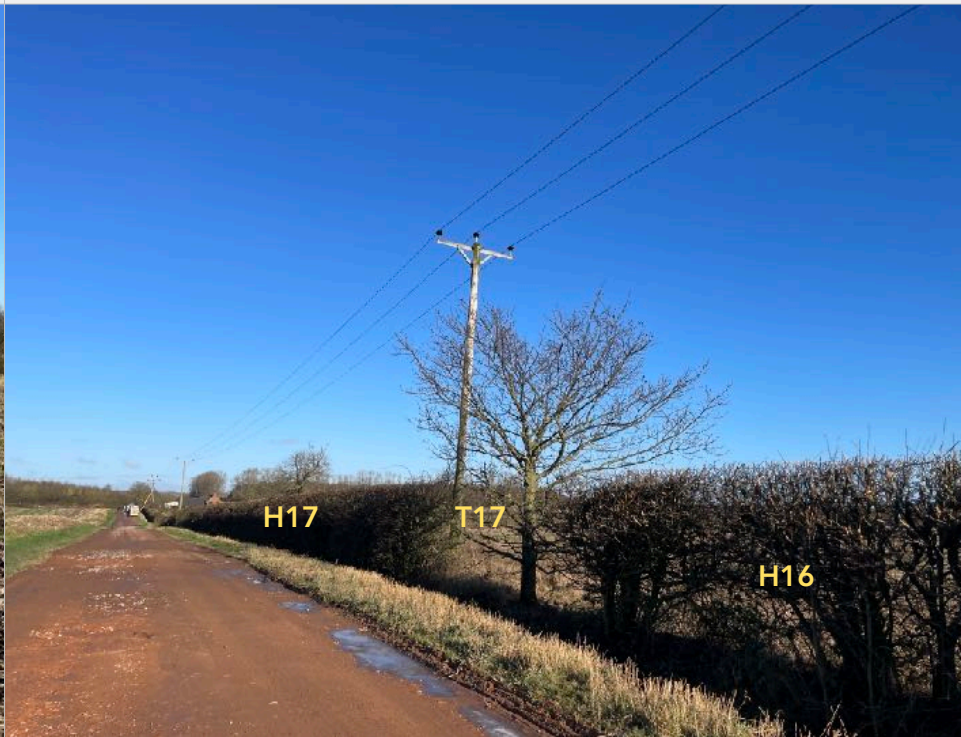


IMAGE 11: View looking east showing the entrance track to the site.



IMAGE 12: View of the woodland (W3) located close to the proposed cable route.



IMAGE 13: The junction of Heath Road (right) with Merrylees Road (Left, looking nwest.



IMAGE 14: High-quality woodland Great Fox Covert, W5, along the southern side of Merrylees Road, looking west.



IMAGE 15: The stream bridge between woodlands W4 and W5 on Merrylees Road, looking west.



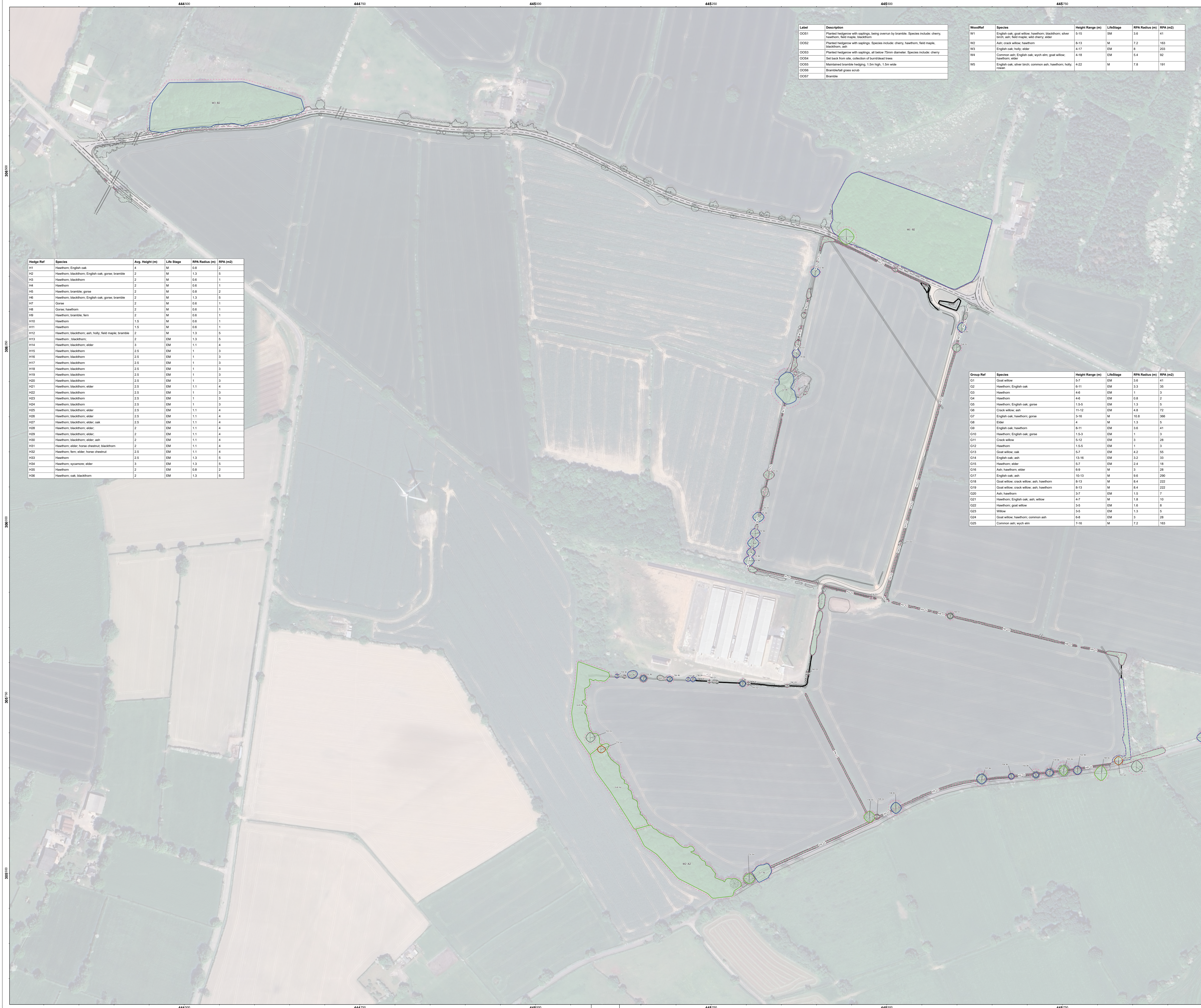
IMAGE 16: The likely location of the cable route from the southeastern site field to Merrylees Road, looking west.



IMAGE 17: Two roadside trees along the southern side of Heath Road, looking northwest.



IMAGE 18: Heath Road, looking northeast showing the wide highway verges.



Label	Description
OOS1	Planted hedgerow with saplings, being over-run by bramble. Species include: cherry, hawthorn, field maple, blackthorn
OOS2	Planted hedgerow with saplings. Species include: cherry, hawthorn, field maple, blackthorn, ash
OOS3	Planted hedgerow with saplings, all below 75mm diameter. Species include: cherry
OOS4	Set back from site, collection of burnt/steep trees
OOS5	Maintained bramble hedging, 1.5m high, 1.5m wide
OOS6	Burnt/steep grass scrub
OOS7	Bramble

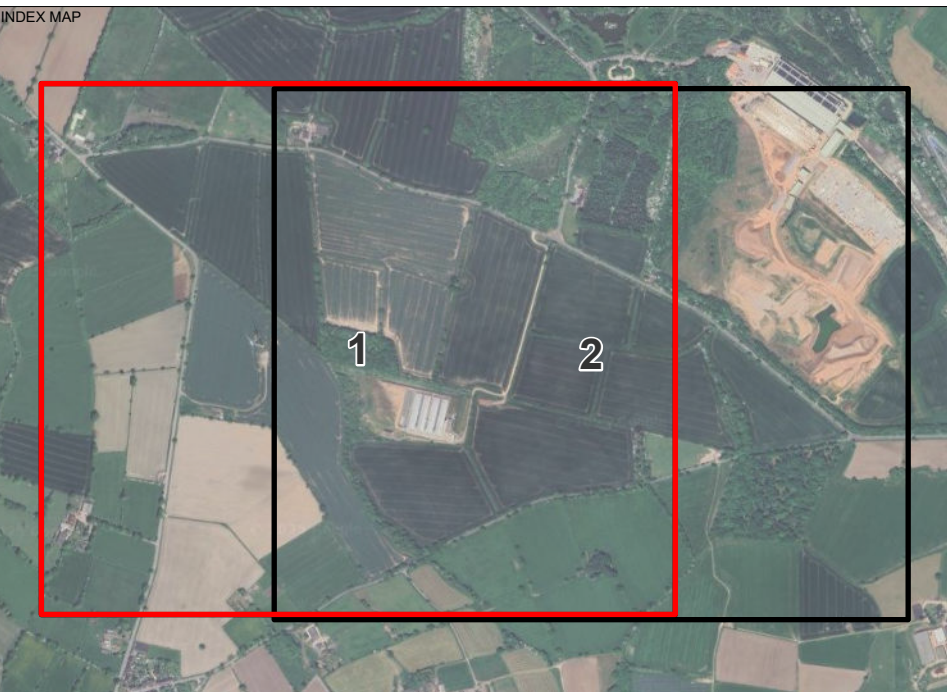
Wood/Ruf	Species	Height Range (m)	Life Stage	RPA Radius (m)	RPA (m2)
W1	English oak, goat willow, hawthorn, blackthorn, silver birch, ash, field maple, wild cherry, elder	5-15	SM	3.6	41
W2	Ash, crack willow, hawthorn	5-13	M	7.2	163
W3	English oak, holly, elder	4-17	EM	8	203
W4	Common ash, English oak, wych elm, goat willow, hawthorn, elder	4-18	EM	5.4	92
W5	English oak, silver birch, common ash, hawthorn, holly, yew	4-22	M	7.8	191

Group Ref	Species	Height Range (m)	Life Stage	RPA Radius (m)	RPA (m2)
G1	Goat willow	5-7	EM	3.6	41
G2	Hawthorn, English oak	5-11	EM	3.3	35
G3	Hawthorn	4-6	EM	1	3
G4	Hawthorn	4-6	EM	0.8	2
G5	Hawthorn, English oak, gorse	1-5.5	EM	1.3	5
G6	Crack willow, ash	11-12	EM	4.8	72
G7	English oak, hawthorn, gorse	3-15	M	10.8	366
G8	Elder	4	M	1.3	5
G9	English oak, hawthorn	8-11	EM	3.6	41
G10	Hawthorn, English oak, gorse	1-5.5	EM	1	3
G11	Crack willow	5-12	EM	3	28
G12	Hawthorn	1-5.5	EM	1	3
G13	Goat willow, oak	5-7	EM	4.2	55
G14	English oak, ash	13-19	EM	5.2	33
G15	Hawthorn, elder	5-7	EM	2.4	18
G16	Ash, hawthorn, elder	6-9	M	3	28
G17	English oak, ash	10-13	M	9.6	290
G18	Goat willow, crack willow, ash, hawthorn	8-13	M	8.4	222
G19	Goat willow, crack willow, ash, hawthorn	8-13	M	8.4	222
G20	Ash, hawthorn	3-7	EM	1.5	7
G21	Hawthorn, English oak, ash, willow	4-7	M	1.8	10
G22	Hawthorn, goat willow	3-5	EM	1.6	8
G23	Willow	1-3	EM	1.3	5
G24	Goat willow, hawthorn, common ash	6-8	EM	3	28
G25	Common ash, wych elm	7-16	M	7.2	163

- 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/offside tree/out of scope (OOS)
 - Tree/Group/Hedgerow not on topographical survey. Location given is an estimate

Tree Ref	Species	Height (m)	Life Stage	RPA Radius (m)	RPA (m2)
T1	Oak (English)	12	EM	7.7	185
T2	Oak (English)	12	EM	6.4	127
T3	Oak (English)	12	EM	10.2	327
T4	Oak (English)	12	EM	6	113
T5	Oak (English)	12	M	9.7	297
T6	Hawthorn	5	M	2.5	20
T7	Willow (Goat)	11	M	5.7	142
T8	Oak (English)	5	SM	1.3	5
T9	Oak (English)	9	EM	4.8	72
T10	Oak (English)	9	EM	3.9	49
T11	Oak (English)	8	SM	2.6	22
T12	Oak (English)	7	EM	2.8	22
T13	Oak (English)	14	M	7.8	191
T14	Oak (English)	20	M	14.4	651
T15	Maple (Field)	8	EM	4.4	62
T16	Oak (English)	5	SM	1.6	8
T17	Oak (English)	5	EM	2.4	18
T18	Ash (Common)	13	EM	7.3	168
T19	Oak (English)	16	EM	7.8	185
T20	Ash (Common)	10	M	6.6	137
T21	Ash (Common)	12	M	7.2	163
T22	Oak (English)	11	M	6.6	137
T23	Oak (English)	12	M	12	452
T24	Oak (English)	9	M	7.8	191
T25	Ash (Common)	11	M	8.4	222
T26	Oak (English)	9	M	4.8	72
T27	Ash (Common)	14	M	10.8	366
T28	Ash (Common)	14	M	10.8	366
T29	Willow (Goat)	6	EM	3.3	35
T30	Oak (English)	11	M	9	254
T31	Oak (English)	14	M	9	254
T32	Ash (Common)	6	M	4.8	72
T33	Ash (Common)	12	M	8.4	222
T34	Ash (Common)	9	EM	3.3	35
T35	Willow (Goat)	9	EM	6.1	118
T36	Willow (Goat)	7	EM	6	113
T37	Ash (Common)	6	EM	2.6	22
T38	Ash (Common)	8	EM	2.6	20
T39	Willow	3	SM	2.6	22
T40	Willow (Goat)	7	EM	7.4	174
T41	Hawthorn	4	EM	2.4	18
T42	Hawthorn	4	SM	2.6	22
T43	Willow (Goat)	4	SM	2.6	22
T44	Oak (English)	18	M	10.8	366
T45	Ash (Common)	20	M	11.4	408
T46	Ash (Common)	18	M	8.9	248
T47	Oak (English)	12	EM	5.8	104
T48	Oak (English)	12	EM	6.2	209
T49	Ash (Common)	13	EM	7	152
T50	Ash (Common)	18	M	10.1	319
T51	Ash (Common)	21	M	12	452
T52	Ash (Common)	9	M	6.1	118
T53	Oak (English)	12	EM	7	152
T54	Ash (Common)	14	M	7.9	187
T55	Ash (Common)	14	M	7	152

Tree Canopy Area	Tree Group Canopy Area	Woodland Canopy Area	Hedgerow Canopy Area
Category	Category	Category	Category
Total SCM	Total SCM	Total SCM	Total SCM
A	A	A	A
2634.3	1073.7	1160.5	2723.3
B	B	B	B
2144.8	3596.3	3596.3	
C	C	C	C



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
Heath Road (4924)

DRAWING TITLE
Tree Survey and Constraints Plan with Aerial

SCALE
Scale: 1:2,500 @ A1

DRAWING NUMBER
BHA_4924_01

DRAWN BY
AT

APPROVED BY
IH

REVISION
A

SHEET
1 of 2

DATE
27/03/2025

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

CLIENT
DWD Property Planning

CREDITS
Crown copyright. All rights reserved.
2025 Emapette Licence number AC0000808122.
Ordnance Survey Copyright Licence number 100054267.

Barton Hyett Associates
Arboricultural Consultants
Tel: 01386 576161
Address: Office 11, Unit 22 Lansdown Industrial Estate, Cheltenham, GL51 8PL

SUMMIT GEO
enquiries@barton-hyett.co.uk