

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Hill View and Wayside, Eastergate Lane, West Sussex, PO20 3SJ

Client:

Joe Shopland

Survey date:

13th August 2024 [Amended 15/04/2026- updated plans].

Project:

This report is prepared to inform a planning application with the Rochford District Council. The proposal is described as:

The construction of ten detached homes and garages, with the demolition of the existing commercial barn structures.

[Unsubmitted]

PEA survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2024.](#)

The site survey was undertaken by Annabel Sharpe BS (Hons) Consultant Ecologist, (Natural England Protected Species Licence Numbers: [Bats] (2023-11145-CL17-BAT))					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
27/02/2025	23	74	30	5	None

Ecological Survey Factor	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, photos in appendix 3 and proposal plan in appendix 4). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings (UKHab codes used)	The site is located at grid reference SU94850605 and encompasses an area of 0.8ha. This includes residential house and gardens, commercial barn buildings and ‘priority-listed’ orchards. The priority-listed orchard according to MAGIC is listed to cover 0.4ha of the overall site boundary. However, this is not the case when visiting the site; most of the orchard no longer exists. Many of the trees were cleared several years ago due to deer damage 2020-2021. The retained orchard covers only 0.1 ha of the site, located in the north-western half. No orchard habitat is present within the neighbouring fields. The site plans have since been amended (as of 28/08/2028) to confirm that the orchard will not be removed as part of the updated proposals. There are also continued listed orchard areas and mature trees on the southwest boundary of the site. The distribution of the trees in these listed areas would suggest this is not full commercial fruit production and this has turned into scrub and woodland instead. This orchard/woodland and scrub area continues for 480m south of the site and 660m southeast. These areas will not be impacted by the proposal.

	Numerous developments are happening close to the site. New housing development is occurring 190m west and 520m north and is currently ongoing. Eastergate Lane runs across the site's north boundary, but no other roads run within 100m of the site in any other direction. The site sits on freely draining, slightly acid-loamy soils with freely draining soils. <u>Habitats identified at the site include</u> g4 Modified grassland g4 27- Traditional orchard g4 32- Scattered trees h2a 11 Native hedgerows with trees. h2 Mixed hedgerow u1 828- Vegetated Garden u1b5 Buildings u1b Developed land, sealed surface u1c Artificial unsealed surface. w1g 34- Ecologically valuable line of tree <u>Developed, sealed surface [u1b6]</u> The access track onto the eastern half of the site is a concrete driveway. (See Fig19) <u>Developed, sealed surface (buildings) [u1b5]</u>
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	There are 6 structures on the site. This comprises a detached residential house and 5 workshops/barns/outbuildings of various materials and conditions. The residential house will not be modified or changed as part of the development proposals but the 5 workshop buildings will be demolished. Further details of these buildings are within the bat section of this report. <u>Artificial, unsealed surface [u1c]</u> <u>518, 519, 522, 523</u> <u>Neglected, abandoned, native and non-native.</u> The majority of the eastern half of the site has an unsealed surface of gravel. These areas have not been managed for several years and there is a slow encroachment and succession of pioneering plants and ruderal species. (See Fig 20 and 21) This includes; D- spear thistle, common nettle, fleabane, sow thistle A-buddleia, greater plantain, F- common dock, ragwort O- scarlet pimpernel R- weld, knotgrass evening primrose <u>Vegetated garden [u1-828]</u> <u>517</u> <u>Recent management</u> There is a garden as part of the residential property on the eastern half of the site. No fence or walls separate this boundary from the previous adjacent commercial businesses.
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	Part of this garden has been regularly mown this year to keep a short lawn closer to the house with a sward height of 10cm (See Fig 25) while the lower half has not been mown in the last few months (See Fig 26), with a continuous sward height of 70cm. The lower half used to be regularly ploughed as part of a small allotment, which current aerial photographs from online sources would show. There is also some re-growth of rhubarb within this long-grass area. The regrowth of grassland in this area is dominant in Yorkshire fog with over 80% of the site being this grass species. The herb count in this area was very low, with herb species absent from most of this grassland. Herbs presents include R- Dandelion, buddleia, creeping buttercup, white clover, ragwort. This is expected, as this grassland area has not been long-term established. This will be cut soon within the next month as a likely final cut for the year. <u>Native hedgerows with trees [h2a- 11]</u> This hedgerow divides the west and eastern half of the site (See Fig 40). This hedgerow does not see regular maintenance, as such it is over 2m high and 2m wide, except for the southern end where it is less than 1m wide and less than 2m high. The southern tip is used as a push-through to get to the western half. There are several small and semi-mature trees in this hedgerow including black walnut and silver birch. There are other wooded species, as part of the overall hedgerow appearance, including hazel, oak, holly and hawthorn. The eastern half of the hedge has items stacked against it, as part of the previous commercial areas, such as metal containers. The western side of this hedgerow faces the grassland, with a tall herb and ruderal growth of nettles at the base. There are also grass cuttings placed against the western side of this hedge. Apart from the small push-through gap, there are no gaps in the hedge canopy, or base of this hedgerow. With the push-through gap making up less than 10% of the overall length.
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	There's currently a lack of damage to the hedge from deer browsing or excessive cutting. This hedgerow bridges the woodland area to the south, to the garden to the north and measures about 30m long. <u>Non-native dominant hedgerow [h2b]</u> Other hedgerows around the site are dominantly non-native species. This includes hedgerows that form part of an adjacent garden situated in the middle of the site, as well as hedgerows on the northeastern boundary that is adjacent to another garden. The central non-native hedgerows are not part of the site's development and belong to neighbouring properties. While native species like hawthorn are present, the dominance of hedge species in the northeastern hedge is ornamental. (See Fig22) These haven't been regularly managed and are slowly developing into a line of young trees. Because of this, there is no understory growth on this hedge boundary, leaving a very gappy wooded structure at the base. There is no vegetated buffer on the inside, as this is part of the gravel areas of the site. The northern buffer of this hedge is a 1m strip of grass which is mown to not cause an issue to the road. The height of the northeastern boundary hedge measures over 3m high and 1.5m wide. The base growth is less than 1m in width. <u>Modified grass [g4]</u> <u>27, 32, 517, 522,523</u> <u>Traditional orchards, scattered trees, recent management, native and non-native.</u> The western half of the site historically was a traditional orchard. Many of the trees no longer exist and were removed several years ago due to irreversible deer damage. Around 20 trees still remain and are only in the northern half of this grass area (See Fig34). The grassland in these areas is often regularly mown, but due to circumstances this year only part of the southern half
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	was mown in the last few months (See Fig 27 and 28). This leaves over half the site with a sward height of 10cm and the rest with a continuous sward height of over 1m. The habitat map in Appendix 1 showcases the divide in sward height. The grassland within the orchard has been mown in the last few months, much of the grass had not been collected and is left in situ (See Fig 33) which creates a smothering layer that would suppress many herb species and assist in creating a very rank grassland. It is unknown the historic management of this orchard but is not currently commercially managed. The species richness in this area is poor, with less than 5 species per m² seen for most of the grassland Herb species observed in this grassland area include D A Ragwort, spear thistle F white clover, common dock O R autumn hawkbit, common mouse-ear The grass mix itself is dominant in Yorkshire fog (more than 80%) with occasional perennial ryegrass and false oat grass. Common bent was present but in less than 5% of the area. There is evidence of some digging by mammals in very few locations close to the line of oak trees, but do not contribute to any area of significant bare ground more than 1% This area is due to undergo a mowing in the next few weeks.
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	There are scattered trees around the orchard's north and west boundary. The majority of these are non-native, such as Chinese tulip tree, judas tree bamboo, and myrtle. These could have been historical escapees from the garden adjacent. There is a pile of brash in the central grass area, likely from previously cleared trees, and a ruderal pile created on top of grass clippings (See Fig 31 and 32) The locations noted on the habitat survey map in Appendix 1. <u>Ecologically valuable line of trees [w1g-34]</u> On the southeast boundary of the western grassland is a line of mature English oaks. While these form part of the woodland and scrub areas, there is a line of these oaks that are within the site boundary. These trees stand several meters apart from each other but do connect via the crowns. These mature oaks are known to have a tree preservation order (TPO) listed on them. There are ecologically valuable features, such as snapped limbs, deadwood limbs and woodpecker holes. (See Fig 29 and 30). The base of these trees is part of the mown grassland as well as bare ground dominated by common nettles. <u>Built linear features- Fence [u1e-612]</u> There is a fence around the site boundary, which separates the grassland of the site, from the grassland adjacent. This is a wire stock-proof fencing and therefore not restrictive for wildlife movement. There is also a barbed wire fence behind the line of oaks, separating the site from the adjacent woodland, but does not contain any stock-proofing. This would allow any wildlife easy access on and off-site from the woodland. <u>Local notable habitats</u> Adjacent on the south and southeast boundary there is a large area of trees, scrub and abandoned orchards, around 17ha in size. This could not be explored fully as this was not publicly accessible land. No fruit trees could be seen from the site's boundary
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	to indicate an orchard still present but may be present much further in. From aerial images, this can be concluded as no longer a managed orchard. This stretches for over 600m to the southeast. <u>Other notable habitats within 2km include.</u> Priority listed lowland meadows measuring 13.2ha, 380m northwest 2.1ha of ancient woodland, 880m northeast Wood pastures and parkland 1.2km southwest and 1.6km north.
<i>Foreseen Impacts</i>	The proposed development will result in the loss of grassland, the developed areas and as part of the native hedgerow (around 20m) . This will result in a net loss in biodiversity at the site. The line of oak trees will not be removed, and a buffer from these trees has already been considered with the development. No impacts are expected on any notable habitats within 2km of the site.
<i>Recommendations</i>	On-site habitats Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). Notable habitats No direct impacts to the onsite traditional orchard are anticipated as a result of the updated plans which exclude works in this area. The orchard itself was recorded as diminished in size due to the irreversible herbivore damage. Moreover, the ground flora within the orchard shows limited species diversity, being predominantly grass-dominated with minimal herbaceous presence.

	Additionally, due to the proximity of the site to adjacent traditional orchard and woodland bordering the of the site, indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction. A Construction Environment Management Plan (CEMP) may be required for this. Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. This is mandatory for larger developments and comes into force for smaller developments on 2nd April 2024. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	A review of MAGIC.gov.uk database revealed no statutory designated site within a 2.5km search radius of the site. The presence of non-statutory designated sites within 2km of the site cannot be established without data from Sussex Biodiversity Record Centre (SBRC).
<i>Foreseen Impacts</i>	The site lies within the impact risk zone for Fairmile Bottom SSSI. However, the proposed development type does not fall under a high-risk impact for this designation.
<i>Recommendations</i>	None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	While buddleia was present on the site, this plant is not yet identified as an invasive species under section 9 of the wildlife and Countryside Act (1981- as amended).
<i>Foreseen Impacts</i>	<i>None</i>
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	

<i>Summary of Survey Findings</i>	The head of a male stag beetle was found inside one of the buildings during the visit- likely predated. (See Fig 39) This individual would have likely come from the adjacent woodland, but it does indicate some nearby presence. There are also piles of deadwood in several locations on the site (See Fig 23 and 23) and their location is noted on the survey map in Appendix 1. Rotted wood and tree stumps are the preferred habitat for this species and decaying wood was observed present from the fence boundary within the woodland itself in many locations. This species is protected under the Wildlife and Countryside Act (1981 as amended). There is a small volume of butterflies seen present around the site, in particular around the buddleia growing around the site, including large white, tortoiseshells, red admiral, peacock, comma, meadow brown and speckled wood. These were all seen in low numbers, with no more than 2 individuals of any species seen at a time. However, 2024 has been a record-low year for nearly all species, so numbers seen this year would be expected to be very low. The area of currently unmown grass would support a small population of crickets and grasshoppers, as heard on the day. This area is often mown to a short sward height, but this year only part of this grass had been mown (see Fig 27 and 28). This usual regular mowing would not aid in a significant or rare population to establish in just a few months of no mowing. The line of oak trees on the boundary would support a wide invertebrate community with 257 niche invertebrates relying on this tree species. The orchard trees would provide invertebrates with nectar in spring and fermenting apples in the autumn period if windfall apples are left in situ. The hedgerow also would support invertebrates with flowering and fruit-producing species present in this habitat.
<i>Foreseen Impacts</i>	The mature oak tree line is to be retained, as these trees are protected.

	There will be disruption to the site including habitat loss of grassland, hedgerow, ruderal and orchard trees. This will see a temporary reduction of invertebrate-supporting habitats. It is not expected the grassland area itself to support rare or significant populations and therefore no major impacts. There are also grasslands of long grass retained adjacent to the boundary that can continue to support ground invertebrates. The deadwood pile directly under the oak trees will remain in situ, but the northeastern deadwood pile will be moved. If this is taken off-site, this could see any potential stag beetle eggs laid within these areas destroyed
<i>Recommendations</i>	Retain all deadwood on the site. The northeastern deadwood piles can be moved into the southeastern corner of the site, or also placed underneath the oak tree line, adjacent to the other deadwood piles. These should have a barrier erected with signs to inform that this habitat should not be removed, due to the potential of the protected beetle. Suggested biodiversity enhancements The incorporation of bee bricks (e.g. Ibstock BeeHabitat or similar alternative brand) into the fabric of the new buildings would provide sheltering opportunities for pollinators. These should be installed 0.5m above ground level on a south-facing elevation with no obscuring vegetation. The site could be further enhanced via the provision of native wildflowers or wildflower turf, which would provide foraging opportunities for invertebrates. The planting of a hedgerow on the grassland boundary would provide nectar and ground foraging for invertebrates. This hedgerow should only include native species such as hawthorn, oak, beech, chestnut, holly and blackthorn and should include at least a 1m buffer of grassland at its base.

	Planting of shrubs and plants as part of garden landscaping with good invertebrate supporting qualities. Native shrubs and plants are preferred as this will also reduce the risk of non-native plant species spreading into the woodland adjacent.								
Bats									
Summary of Survey Findings	EPSL data A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. There are X EPSLs within a 2km radius of site as detailed below: <table><tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr><tr><td>2016-24108-EPS-MIT</td><td>Common pipistrelle</td><td>1.19km southeast</td><td>Destruction of a resting place</td></tr></table> There are no Special Areas of Conservation designated for bats within 10km of the site. Foraging and commuting habitat Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of modified grassland, a small collection of orchard trees, gardens, and neglected areas of ruderal and hedgerows. This is all situated directly adjacent to an area of woodland and scrub that stretches for over 600m to the southeast. This includes several mature oaks on the southeast boundary of the grassland on the site. Woodpecker holes were observed on one of these oak trees on the boundary (See Fig 30) which could support roosting bats. This all provides immediate quality forging and commuting routes for any bats dispersing from the buildings on the site, including roosts that may be present within the woodland. The grassland on the site and beside the site is currently not grazed by livestock and has not been for a few years. There are 5 buildings on the site, with a combination of poultry processing, sheds, outbuildings and garages.	EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence	2016-24108-EPS-MIT	Common pipistrelle	1.19km southeast	Destruction of a resting place
EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence						
2016-24108-EPS-MIT	Common pipistrelle	1.19km southeast	Destruction of a resting place						

There is a residential house on the site, but this house is not being developed or altered in any way as part of the development proposals.

B1

(See Fig1-3) B1 is a two-storey, double-pitched roof building. With breeze block walls and corrugated fibre cement roof. The northern room (B1a) is used as a workshop and garage and remains as one open large structure inside (Fig 2). The southern half (B1b) is a previous poultry processing and meat storage, with multiple downstairs rooms and fridge units. Upstairs includes a small loft room (Fig 3). This room measured 3m wide, 2.8m tall and 8m long, with an internal temperature of 22°C and 75% humidity

There was no evidence of roosting bats using this structure.

This building has negligible roosting value.

B2

B2 is a single-storey, timber-frame workshop with a corrugated metal roof, attached to B1 and B3 (See fig 4 and 5)

While there was no direct evidence of roosting bats, there are many plants of wood missing as the figures show. This would allow bats direct access inside. While it contained no features or conditions such as a separate loft for use as a day roost or maternity. This could be used during the night for roosts such as feeding roost or night roost, especially when combined with evidence found in B3 (See below). Evidence in this structure may have also been missed due to the volume of items, dirt and debris in this structure.

This building has low roosting value.

B3

	B3 is a single-storey, red-brick outbuilding attached to B1 and B2. This is a double-pitched roof building, with a corrugated fibre cement roof, and a sarking board roof lining underneath. This structure is missing its windows and there are several holes within the roof (See Fig 9) There is a large spacing between the top of the gable wall and the corrugated roof, (See fig 6) large enough to reach inside, which could support crevice-dwelling bats. Initially searching these areas with torch and endoscope did not produce any bat droppings between these layers. However, this space stretches the full length of the building so evidence could be further towards the back. A breeze was felt being drawn through, due to the holes at the rear of the building's roof structure. Movement can take place internally between the two rooms, through the dividing wall (See Fig 8) Evidence of roosting bats was discovered internally within both B3a and B3b. There were feeding remains of prey items like yellow underwing moths and tortoiseshell butterfly wings scattered in a few locations, with chewed ends. Some of these appeared fresh in condition. Within B3b there were several bat droppings observed under the central ridge line (See fig10). After photographing these were collected for DNA testing, and less than 10 droppings were found in this space at mixed colouration. Combined with the feeding remains this is likely being used by this bat as a feeding roost, such as a long-eared bat. B3a and B3b both measured 11m long, 6m wide and 2.5m tall at the ridge line, with internal temperatures of 18°C and humidity 75%. Under the corrugated roofing material, this measured 25°C and 68% humidity. Due to the poor stable thermal properties of the building, it is not expected this building would host an important roost such as a maternity roost. <u>The building has moderate roosting value.</u>
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B4

B4 is the most modern of the 5 buildings.

This is a metal barn structure, with walls, doors and frames all constructed from metal. There are no windows on this structure. There is no separate loft or lining on this building. (See Fig 16)

The southern door currently sits partially lifted, with a gap 30cm at floor level (See Fig 18) with the ruderal growth in front, it is unlikely bats would enter the building this low to the ground.

There was no evidence of roosting bats seen within this structure.

This building measures 23.8m long, 10m wide and 5.1m high at the ridge. Internal temperatures were 19°C and humidity 73% but ridge temperature was 24°C.

There were no external features for roosting bats, and the metal structure would have poor thermal properties for supporting roosting bats.

B4 is negligible for roosting bats.

B5

B5 is a one-storey structure attached to B4. This building acts as a storage and garage workshop. This is a single pitched building with breeze block walls and a single-pitched roof with corrugated cement fibre roof. This is divided into two rooms, with the loft stretching between the two.

There is a false ceiling of ceiling tiles. In places where tiles have fallen out the inner roof loft is exposed (See Fig 12 and 13). The loft is lined with sarking boards.

The room measures 5.6m wide, 2.3m to the ceiling tiles, and 4.5m to the ridge line where ceiling tiles are missing. Each of the two rooms measures 10.3m long. Internal temperatures were 17°C and humidity 72%.

	There was no way to explore these upper areas as there were no supporting beams or flooring to walk on. There were no features observed that would allow access inside this structure. No evidence of roosting bats was found on the floor, especially as access would be possible through the ceiling tile gaps. <u>B5 is negligible for roosting bats.</u>
<i>Foreseen Impacts</i>	The development proposals will see the destruction of B1-B5 which will destroy bat roosts present within B3. The proposal will also see the removal of grassland, part of hedgerow which will see a limited reduction of foraging habitat for bats. The proposal will also see an increase of light levels on the site, including the addition of lighting in parts of the site which currently have none. The oak trees and orchard habitat will all be retained with no alterations.
<i>Recommendations</i>	B3 is a suspected bat roost of moderate value, with evidence that the building is used currently as a feeding roost by a very low number of bats. Two bat emergence/re-entry surveys are required on B3 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the building. One of these survey visits should be completed during the optimal survey period mid-May to August inclusive. The survey visits should be at least three weeks apart. If there are reasons to suspect a larger roost may be present within the roof of B3 and a maternity roost cannot be ruled out, this may require an additional survey end of May-June the following year.

	Sub-optimal: early May and September. Would require greater justification of timing e.g., weather conditions, known local bat activity. Two surveyors would be required to watch this building. B2 should also be observed at the same time due to features on this building. A static detector should be left inside B3 between the two surveys. With evidence of a feeding roost, emergences are likely to not be observed, the static will detect movement throughout the night including the regularity of visits and if any additional bat species are also using this building. A bat licence would be required to demolish the buildings as it would involve the destruction of roosts. This is applied for with the help of a suitably licenced bat ecologist after planning permission is granted but before the commencement of works. DNA testing will be required of the dropping sample obtained, and biological records obtained from the appropriate provider in order to get any licence. A third surveyor will be deployed within the grassland and orchard. This surveyor will undertake a Night walkover survey, with a focus on the use of the tree line, grassland and orchard by foraging and commuting bats. This will be undertaken at the same time as surveys of B3 with regular stops at different locations within this area of the site. A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website:
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	https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 Enhancements are dependent on the outcome of further surveys
Birds	
<i>Summary of Survey Findings</i>	There was evidence of birds visiting several of the buildings in particular B2 and B3 where these are openly accessible, even when doors are closed. The mossy nest constructions suggested birds such as wrens and robins. The lack of concentration of droppings around these nests and their condition would suggest these did not occur this year. The trees and hedgerows around the site are also likely to support an assemblage of nesting birds. The woodland adjacent would support birds as well. Both green and great spotted woodpeckers were heard calling during the site visit from these areas. Woodpecker holes were seen on the line of mature oaks in the southeastern boundary of the grassland. If not used by this species these can be taken by other woodland bird species There was a lack of bird activity within the grassland and orchard. There was also a lack of bird activity in the grassland fields adjacent. No nests were observed within any of the orchard trees. In particular there was a lack of activity from ground-nesting bird species. The neglect of these fields has left a sward height over 1m. This is unsuitable for many ground-nesting species that require arable, or mixed grazing to create a diverse sward height and foraging areas. All birds heard and seen during the site visit were woodland and garden-associated species, such as woodpeckers, woodpigeon, robin, wren, blackbird, carrion crow, great and blue tit and nuthatch. No schedule 1 or red-listed species were seen or heard at the time of the survey.
<i>Foreseen Impacts</i>	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests with the destruction of the buildings, the removal of trees, part of the hedgerow and grassland around the site. This would also see a temporary reduction in foraging areas while construction takes place.

	There will be no direct impact to the woodland adjacent to the site.
<i>Recommendations</i>	Any building or vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. This should be conducted 48 hours prior to any work taking place. This will not give time for any new nest to begin establishment before work begins Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. <i>Enhancements</i> The inclusion of built-in bird boxes into the fabrics of the walls of the new buildings. This can be a combination of swift bricks, sparrow-terrace boxes as well, as external swallow nest cups. These should be installed near the eaves of the buildings, 3-5m in height. These should be installed on northern or north-eastern elevations to avoid dominant weather direction.
Reptiles	
<i>Summary of Survey Findings</i>	There is some potential value for reptiles in the unmown areas of the garden and the field. However, these areas are relatively recent, as the grassland has usually been maintained through regular mowing in previous years. Due to the small scale of the unmown areas, it is unlikely that they would support a significant reptile population. Nevertheless, individual animals could occasionally be present and may enter the site from adjacent habitats, where they are known to be present. The hedgerows can also provide shelter and hibernation opportunities.
<i>Foreseen Impacts</i>	A small area of suitable reptile habitat will be removed as part of the development. There is a low risk that individual reptiles, or a small number, could be present within the works area. Without appropriate mitigation, these animals could be at risk of injury or mortality.

<i>Recommendations</i>	It is acknowledged under the findings of application BN/85/23/OUT that reptiles activity was noted in landscape adjacent to the site. The site itself has limited and low-quality habitat present on site, the low likelihood of significant populations being present, and the disproportionate cost and delays associated with surveys relative to the scale of works. Instead, a precautionary method of working will be required, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. This shall be done with a cut to 15-20cm, a rest period of 24 hours and then a final cut to 5cm. This will give time for reptiles to disperse to the long grassland and woodland directly adjacent to the site. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. • If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. An ecologist should also be contacted for advice. Retention of the current log piles should be maintained. The northeastern log pile will have to be moved and can be moved to the oak tree line where another existing log pile exists. Moving this log pile should be undertaken outside of the reptile hibernation season (Oct-March) So that no hibernating individuals are disturbed.
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	If reptiles are discovered during works, all activity will stop and the ecologist will be contacted immediately to advise on appropriate next steps, which may include capture and relocation to adjacent suitable habitat. An ecologist will remain on-call during groundworks to advise should any reptiles be encountered.
Amphibians	
<i>Summary of Survey Findings</i>	There are 1 pond located 160m west of the site. No other ponds are present within 500m. This would not pick up any isolated ponds within nearby residential gardens. Habitats on site include grassland, hedgerows, a line of trees and artificial development. The hedgerow, line of trees and woodland beyond could support amphibians for commuting, foraging and hibernation. In particular the piles of brash and log piles around the site. The grass on site is normally regularly mown, but so far has only been partially mown in the last few months. A short sward grassland is less suitable for amphibians due to exposure to predation and lack of shelter. The lack of connective pond systems in the area, would reduce the likelihood of great crested newts being present. If amphibians are present, these are likely to be common species. The nearest pond systems are over 1km away from the site The nearest EPSL for great crested newts are over 2km southwest of the site
<i>Foreseen Impacts</i>	The grass areas of the site will soon undergo routine cutting, which may cause injury or death to any in the long-sward patches. With the proposed work scattered items and log piles around the site will also be moved. This can cause injury or death to any amphibians that may be hibernating under these items during winter months.
<i>Recommendations</i>	Grass areas will undergo a routine cutting using the precautionary methods listed for reptiles. As also stated, the log pile and item moving, and removal should be undertaken outside of the key amphibian hibernation season so that no individuals are disturbed. This will also include the moving of the brash pile and the section of hedgerow scheduled to be removed.

In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist.

Enhancements.

Planting of a hedgerow around the site's boundary will provide a safer, more direct route for amphibians to commute along. This will also form a safe route as this will connect the woodland to the shrubs and hedge boundary of Eastergate lane, which can assist any amphibians from getting within 30m of the pond 160m away.

Riparian animals	
<i>Summary of Survey Findings</i>	There are no watercourses on or connected to the site.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	None.
Hazel dormouse	
<i>Summary of Survey Findings</i>	There are 4 EPSL for dormice within a 2km radius of the site. The closest of these is 800m southwest of the site and 800m north of the site. There are no woodland or hedgerow networks connecting these areas directly to the site, with the landscape broken up with residential and commercial development, as well as roads. The site is directly connected to roughly 17ha of trees, scrub, orchard and hedgerows on the southwest boundary. There is a hedgerow composed of hazel, bramble and trees such as silver birch and walnut that leads from this area to a nearby garden, measuring around 30m in length. This does not form part of a large hedgerow network leading north as this leads to a managed garden.

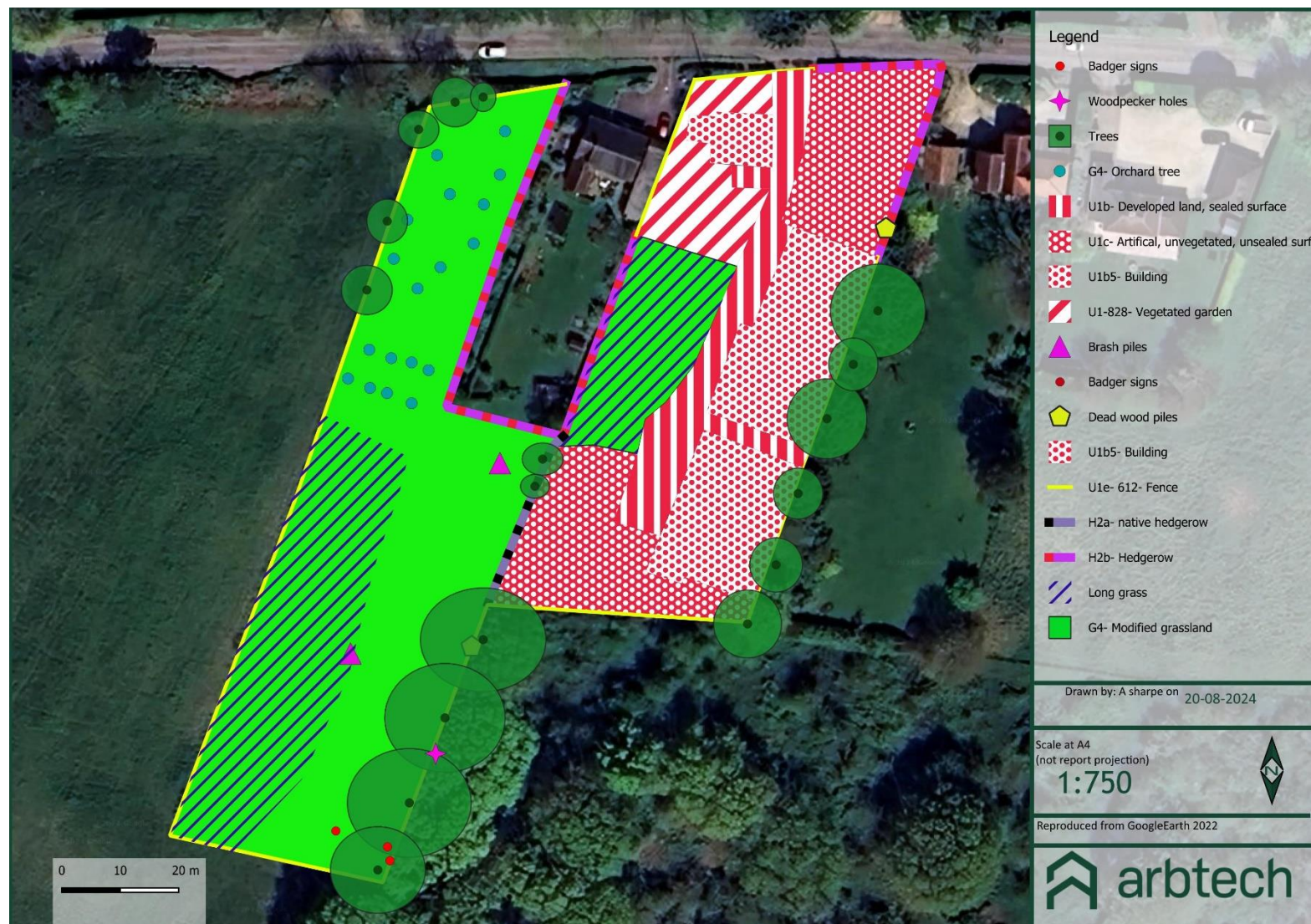
	There are no hedgerows around the boundary of the grassland and orchard. There is a small mixture of native and non-native hedgerows in the northeast corner. This hedgerow does not continue in a hedgerow format leading south behind the buildings and instead turns into a line of mature conifer trees and is broken up leading east as this crosses many gardens and managed hedgerows. The suitability for foraging for dormice is low valued around the site itself, but some if present in the scrub woodland south may use the native hedgerow connected. It is noted for dormice presence under the findings of application BN/82/25/OUT
<i>Foreseen Impacts</i>	There will be a removal of around 20m of the hedgerow connecting the garden to the woodland to the south. While this will not cause a severe impact on any dormice within this woodland and scrub area, or create a gap considered significant enough to hamper dormice movement (30m) if dormice are present within this section, then harm may come to dormice with its removal.
<i>Recommendations</i>	Due to the small scale of the hedgerow and other suitable habitats on the site that belong to private property, surveying for dormice would be unsuitable, due to the minimum requirements of around 30 footprint tunnels of 50 nest tubes spread evenly apart at 10-15m intervals and the lack of habitat of that length. Survey effort would be considered unsuitable. If results did not yield any evidence, under the 2025 guidelines, this is not evidence that dormice are not present, especially when they are known in the area. Even if known, an EPSL cannot be granted on this alone. As a result, even if surveys produced no evidence, a strict precautionary method must be followed due to the known wider presence. . Surveying for dormice cannot take place in the wider woodland environment or hedgerows belonging to private gardens, as this piece of land does not belong to the client. A precautionary working method will be implemented during construction, including the following measures: • Site clearance will be undertaken outside of the dormouse hibernation season (November to March) insofar as is possible

	• A licensed ecologist will fingertip search the hedgerow for any evidence of dormice presence, such as nibbled nuts from the nearby oaks or signs of nest. If found this is the evidence that an EPSL is required to remove the hedgerow. • If no evidence was found, the ecologist will still attend the site on the day when the hedgerow is removed. • A toolbox talk will be given to contractors regarding the possible presence of dormice at the site by the attending ecologist. • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where dormice could be present. • A pre-commencement inspection of the site will be undertaken again for dormice by a qualified ecologist, with a fingertip search of the hedgerow being removed for any signs, such as a dormice nest. They will then oversee the hedgerow being removed, cut down only with hand tools, until the required amount is removed. In the unlikely event that a dormouse or evidence of a dormouse is identified, then a development licence will be required to remove the hedgerow. <u>Enhancements</u> The planting of a native shrub along the grassland boundary will create a connective hedgerow boundary to the northern end of the site. These should be a focus on nut and fruit-bearing species like oak, hazel, hawthorn, holly and blackthorn.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The woodland adjacent to the site offers habitat to support hedgehogs. Hedgehogs can easily access the site for foraging and commuting. Several brash and wood piles on the site could support hibernating and nesting hedgehogs. No direct evidence of hedgehogs was seen, such as noticing hedgehog droppings. But there are plenty of long grass and ruderal areas where it would be less obvious to observe.
<i>Foreseen Impacts</i>	There will be no direct impact to the woodland.

	There will be disturbance to the site which will see the removal of the grassland and part of the hedgerow along with overall tidying of the site. This will also include the removal of brash and ruderal areas and the moving of stored items and log piles. This may see injury and death caused to hedgehogs without the correct precautionary methods in place.
<i>Recommendations</i>	Similar to the badgers, a precautionary working method will be implemented during construction, including the following measures: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Brash, stored items and wood piles will be moved by hand to make sure hedgehogs are not present, this should not be undertaken in winter months Nov-March, when hedgehogs are likely to be hibernating. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. If any hedgehogs are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. If hedgehogs are found hibernating these should be placed in a secure undisturbed area, if not possible brought to a local rescue. <u>Enhancements.</u> The inclusion of hedgehog houses in corners of the site near the woodland, or new brash and wood piles stored against the boundary of the woodland to serve as more natural features. These can be created with the materials already on the site.

	Any dividing fences to include hedgehog highway gaps to allow continued movement of hedgehogs on and off the site.
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Appendix 1: Survey/Habitat map

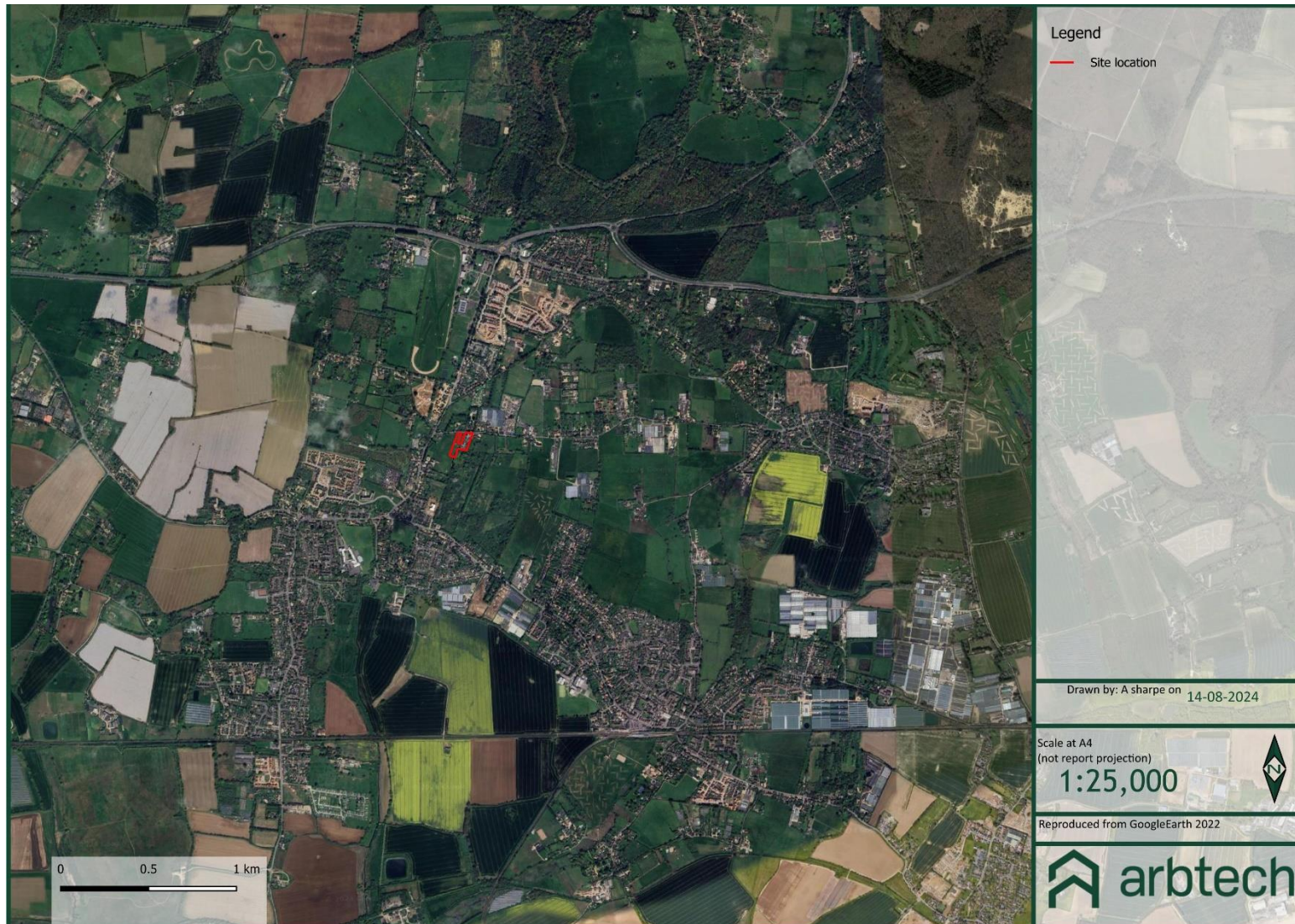


Appendix 1b- PRA survey maps.





Appendix 2: Location map





Appendix 4: Photos



Figure 1- Western views of B1a and B1b



Figure 2- Inside of B1a



Figure 3- Inside upper loft/room of B1b



Figure 4, west view of B2



Figure 5- Inside of B2



Figure 6- South view of B3a and B3b- Gaps between roof and gable wall circled.



Figure 7- Underneath corrugated roof of B3a



Figure 8- inside access between B3a and B3b



Figure 9- Hole back of roof of B3b



Figure 10- Droppings found on the floor of B3b



Figure 11- Fresh feeding signs on the floor of B3a



Figure 12- Inside of B5

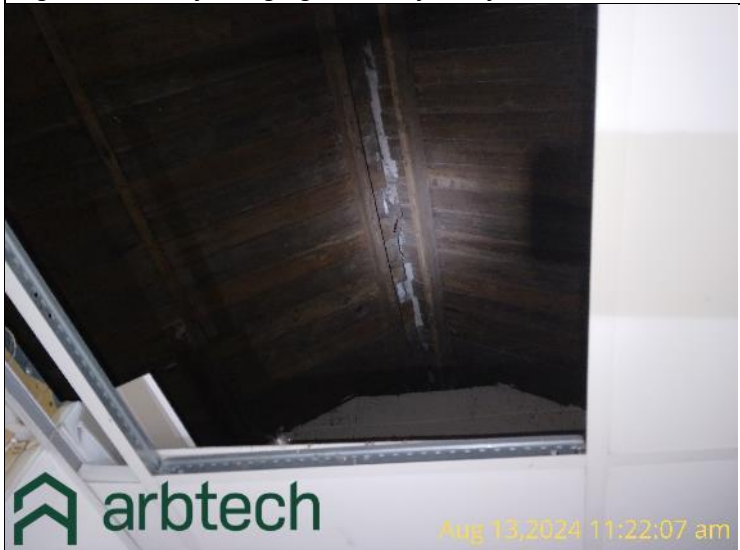


Figure 13- viewings of roof from missing ceiling tiles inside B5



Figure 14-Western view of B5



Figure 15- South views of B4



Figure 16-Internal of B4



Figure 17- South view of B5



Figure 18-Slightly open door, south elevation of B4



Figure 19- Hard standing driveway access



Figure 20- Ruderal and fob encroachment into gravel areas south side of the site



Figure 21- Ruderal and plant growth encroaching on gravel, northeast corner of the site



Figure 22- Hedge on the northeastern boundary- dominantly non-native



Figure 23- Dead wood pile, northeast corner of the site



Figure 24-deadwood pile underneath mature oak trees



Figure 25- Mown lawn of the current garden



Figure 26-Unmown lawn of garden- previous veg/allotment area



Figure 27- Mown area of western field



Figure 28-unmown section of western field- dominated in rank grass, ragwort and thistles species.



Figure 29- Mature oak trees on the southeast boundary of the field



Figure 30-Woodpecker holes in oak



Figure 31- Brash pile, northeastern corner of field



Figure 32- brash pile central area of field



Figure 33- Grass height and condition in orchard



Figure 34- Small apple trees in orchard- not intensively managed



Figure 35- Gravel area, facing north



Figure 36- Fresh poo- badger consistency



Figure 37- Abandoned digging- southeast oak boundary



Figure 38- Snuffe hole and digging in grassland- close to oak boundary

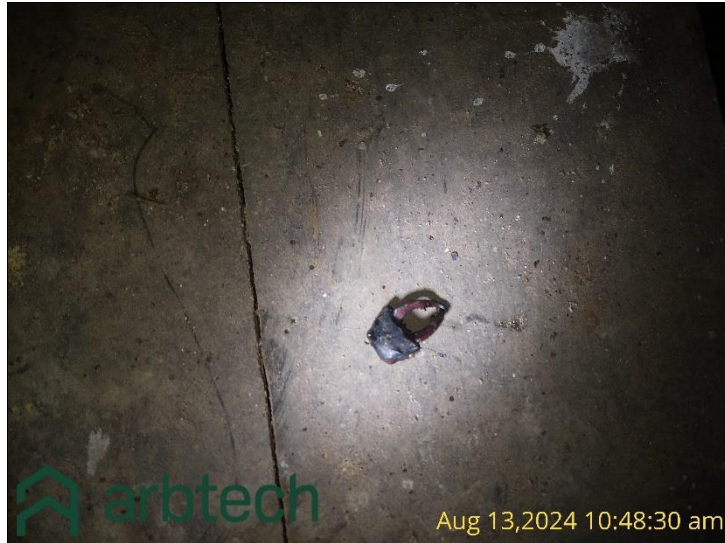


Fig 39- Male Stag beetle head found inside B3



Fig 40- native hedgerow with trees dividing the east and western half of the site.

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