

Preliminary Ecological Appraisal and Preliminary Roost Assessment

Survey site:

Hopehill Scout Campsite, South Street, Wrotham Road, Meopham, Kent, DA13 0QJ

Client:

Gravesham Scouts

Survey date:

29th May 2024

Project:

This report is prepared to inform a planning application with the Gravesham Borough Council. The proposal is described as:
The side extension of a toilet block.

Status	Issue	Name	Date
Draft	1	Josie Cooper BSc, Consultant Ecologist	06/06/2024
Reviewed	1.1	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	20/06/2024
Final	2	Josie Cooper BSc, Consultant Ecologist	20/06/2024

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

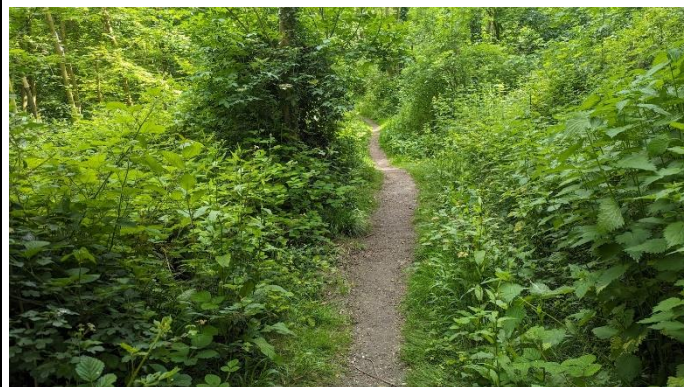
The site survey was undertaken by Josie Cooper BSc (Accredited Agent on Natural England Bat licence number: 2019-41480-CLS-CL18).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
15/05/2024	19	56	30	10	None

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).	
<i>Summary of Survey Findings</i> <i>(UKHab codes used)</i>	<u>Site location:</u> The survey site is centred on National Grid Reference TQ 63852 64057 and has an area of approximately 10.3ha. The site is located south of the town of Gravesend, with Trosley Country Park to the south and Camer Park Country Park to the north. <u>Offsite habitat:</u> Habitat surrounding the site includes agricultural fields and pockets of woodland. In the wider landscape, grassland and pockets of woodland are present. Ancient and deciduous woodland priority habitat is present at the western half of the site. Native hedgerow priority habitat is also present at the north of the site. Lowland calcareous grassland, deciduous woodland, ancient woodland, good quality semi-improved grassland, and traditional orchards are all present within a 2km radius from the site. <u>Onsite habitat:</u>

The site consists of four grassland fields which are in use for camping and a woodland which runs along the eastern boundary of the site. Hard standing and buildings are present at the western area of the site.

Other Lowland mixed deciduous woodland w1f7

The woodland consists of mature beech (D), yew (F), ash (F), oak (O), hawthorn (O), and maple (O), creating a dense canopy layer. The centre of the woodland has very little understorey, however the north and south of the woodland has a dense understorey of nettles (A), dogs mercury (A), red doc (F), brambles (F), cleavers (F), wood speedwell (F), lords and ladies (O), elder (O), bracken (O), and wood violet (O).



Other neutral grassland with scattered scrub and trees g3c 10 32 33

The central field is mowed short, whilst the north and south fields have areas which are mowed to create paths but have a sward height of approximately 40cm elsewhere. Grassland species include cocksfoot (D), bent (A), clover (A), creeping buttercup (F), plantain (F), daisy (O), and dandelion (O). Scattered trees are present throughout the site, including species of sycamore (A), ash (A), cyrpress (A), horse chestnut (F), silver birch (F), oak (F), holly (F), hawthorn (O), Scott's pine (O), maple (O), and apple (O). Scattered scrub

is present around the boundaries of the fields, with species of nettles (A), cleavers (F), brambles (F), cow parsley (F), privet (F), thistle (O), and burdock (O). Two lines of trees are present on the central field; a line of mature sycamore trees at the western field boundary, and a line of mature silver birch trees at the north of the field boundary. At the boundaries of the southern fields, tree lines of oak, birch and sycamore are present.



Buildings u1b5

There are 15 buildings present throughout the camp, including a main building and outbuildings.



Other developed land u1b6

There is hard standing surrounding the main buildings at the centre of the site. A grasspark car park is present at the west of the site.



Species-rich native hedgerow h2a5

	Dense hedgerows are present on field 4 at the north of the site. These include birch (A), hazel (A), hawthorn (A), ash trees (A), elder (O), nettles (O), and doc (O). Hedgerows are approximately 2m in height. Other native hedgerow h2a6 A dense privet hedgerow is present behind the building in field one and is approximately 1.5m in height.  Built linear features u1e Timber and wire fences are present around the majority of the site.
<i>Foreseen Impacts</i>	Although priority habitat in the form of hedgerows and woodland is present on site, and further good quality habitat in the form of grassland is present, only 0.0054ha of neutral grassland will be removed. This is likely to have a minimal impact on biodiversity due to the small area of habitat being lost.
<i>Recommendations</i>	Best practice measures to minimise the possibility of pollution must be implemented during construction. Retained trees surrounding the building 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).

Locality and Designated Sites	
<i>Summary of Survey Findings</i>	There are no statutory designated sites within a 2km radius of the site.
<i>Foreseen Impacts</i>	No impacts foreseen due to the distance from any designated sites and small size of the project.
<i>Recommendations</i>	None required
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	N/A
<i>Recommendations</i>	No further surveys but remain vigilant.
Invertebrates	
<i>Summary of Survey Findings</i>	Woodland, grassland, and hedgerows can offer rich and diverse habitats for invertebrates. The woodland can support various invertebrates which allows the decaying or organic matter. Grasslands provide good habitat for pollinators like bees and butterflies. Hedgerows can serve as linear habitats, creating corridors for movement and connecting larger habitats.
<i>Foreseen Impacts</i>	A small area of 0.0054ha of neutral grassland will be removed during construction. The loss of such habitat will be inconsequential to invertebrate species due to the small area of habitat being removed and the presence of optimal habitat which will remain on site.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	Offsite habitat The site is immediately surrounded by grassland, hedgerows, and pockets of woodland which will provide good foraging, commuting, and roosting habitat for bats. The wider landscape is well connected by woodland and hedgerows.

There are no EPLSs for bats within a 2km radius of the site.

Onsite habitat

The woodland and trees on site provide optimal roosting opportunities for bats, whilst the grassland and hedgerows provide good foraging and commuting habitat. Hedgerows also connect the site to the wider landscape. There are 15 buildings on site which could be used by bats to roost. A PRA was only completed on the toilet block (B1), as this is the only building to be impacted by the proposed works.

B1:

B1 is a single storey brick-built toilet block with metal corrugated roof with no gaps or cracks present. There is a clock tower present on the roof which appears in good condition. The soffits are timber, and a gap is present between the guttering and the soffits all around the building, which may allow void-dwelling bats to enter the loft space. The doors and windows are timber framed, with no gaps or cracks present.



The internal loft space is constructed from metal beams and corrugated metal. The floor is boarded throughout the loft. 100s of bat dropping are scattered throughout the loft. These have been retained and are awaiting DNA analysis. Day light can be seen coming through at the soffits, where the gap is present (circled).



<i>Foreseen Impacts</i>	The extension of this building will disturb the confirmed roost within the loft space. The building is assessed to have moderate suitability, however, a confirmed roost is present within the roof, which could result in the destruction of any bat roosts present and could cause disturbance, death or injury to bats. Additionally, the proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats, however, the proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.
<i>Recommendations</i>	Three bat emergence and re-entry surveys are required during the active bat season (optimal May to August, suboptimal September) to characterise the roosts present. At least two of the surveys should be completed during the optimal survey period mid-May to August inclusive. Infra-red cameras should be used as an aid. Surveys should be a minimum of three weeks apart. Four surveyors are required to provide full coverage of the building. An EPSL application to Natural England will be required. The EPSL application requires that surveys have been undertaken within the most recent active bat season and planning permission must have been granted and all relevant wildlife-related conditions have been discharged prior to submission. A Material Changes Check will be required within three months of the EPSL submission, if no survey work has been undertaken within that period. If bat droppings were found during the PRA, a sample will need to be sent off for DNA analysis to confirm the bat species present, to inform the EPSL application. Biological records data will also need to be obtained to inform the application.

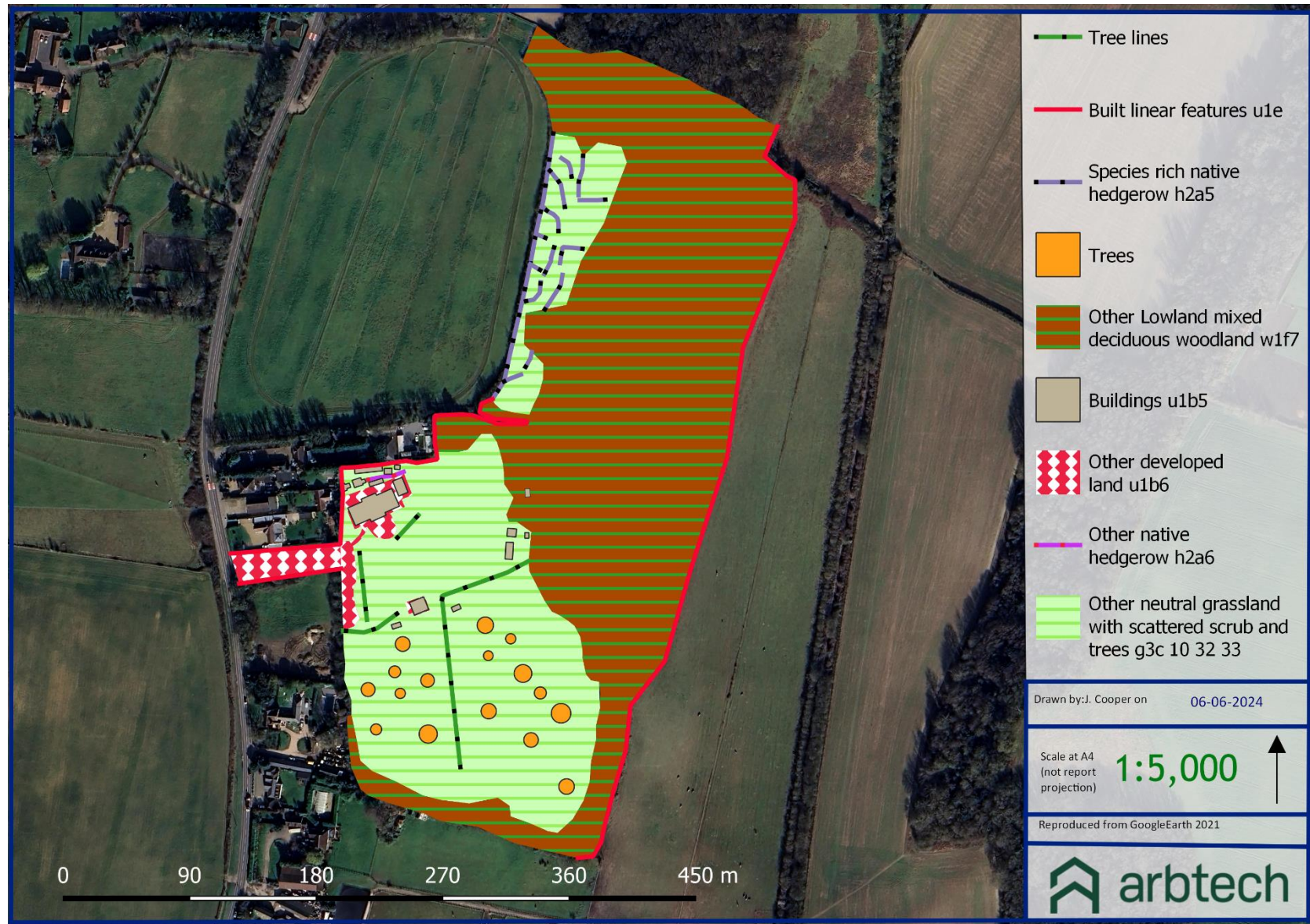
	A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2
Birds	
<i>Summary of Survey Findings</i>	No evidence of nesting birds was found on site during the surveys; however, birds could use the woodland, hedgerow or scattered trees to nest. No habitat for schedule 1 birds was observed.
<i>Foreseen Impacts</i>	No trees or hedgerows will be removed during the proposed construction.
<i>Recommendations</i>	None <i>Enhancements:</i> <i>The installation of bird boxes on the new building will provide additional nesting habitat for birds.</i>
Reptiles	
<i>Summary of Survey Findings</i>	The site provides excellent habitat for reptiles. Grassland of different sward lengths provide good refuge and basking habitat, whilst the woodland and hedgerows also provide good refuge habitat. The site is well connected to the wider landscape through grassland, pockets of woodland, and hedgerows
<i>Foreseen Impacts</i>	0.0054ha of neutral grassland will be removed during construction. The loss of such habitat will be inconsequential to reptiles due to the small area being impacted, the short sward length (reducing the likelihood of the area being used for refuge), and the abundance of suitable habitat in the local area and wider landscape. Although a small area of suitable habitat is being removed as part of the development, there is a low risk that a low number of reptiles could be present in the vicinity of the works. These could be injured or killed without mitigation.

<i>Recommendations</i>	<i>A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:</i> <i>• Vegetation will be cut and maintained at a short sward (5cm) to discourage reptiles.</i> <i>• Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</i> <i>• Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats.</i> <i>• Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</i> <i>• 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.</i> <i>• In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.</i> The site could be enhanced for reptiles post development with the inclusion of log piles and a compost heap.
Amphibians	
<i>Summary of Survey Findings</i>	Off-site habitat and connectivity: There are three ponds located within a 500m radius of the site. P1 is located 220m to the west, P2 is located 300m to the north, and P3 is located 380m to the west. The site is well connected to the wider landscape through grassland, hedgerows, and woodland which provides optimal habitat for amphibians

	for refuge, commuting and foraging, however the A227 (a busy and kerbed road) is disconnects P1 and P3 from the site Onsite habitat: Grassland, woodland, scrub, and hedgerow on site provide optimal habitat for amphibians with the presence of dense vegetation for refuge and foraging, and hedgerows and tall grass for commuting opportunities.																										
Foreseen Impacts	0.0054ha of neutral grassland will be removed from the site during construction. If great crested newts are present within the pond 300m to the north, this will constitute a loss of 0.0054ha within 250m to 500m of a potential breeding pond. When completing the rapid risk assessment published by Natural England (Natural England 2015), the proposed development produces a green risk score, which states: Offence Likely Unlikely. <table><tr><th>Component</th><th>Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)</th><th>Notional offence probability score</th></tr><tr><td>Great crested newt breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land within 100m of any breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land 100-250m from any breeding pond(s)</td><td>No effect</td><td>0</td></tr><tr><td>Land >250m from any breeding pond(s)</td><td>0.001 - 0.01 ha lost or damaged</td><td>0.0005</td></tr><tr><td>Individual great crested newts</td><td>No effect</td><td>0</td></tr><tr><td colspan="2"></td><td>Maximum:</td></tr><tr><td colspan="2"></td><td>0.0005</td></tr></table> <table><tr><td>Rapid risk assessment result:</td><td>GREEN: OFFENCE HIGHLY UNLIKELY</td></tr></table> Although the removal of 0.0054ha of neutral grassland will not impact GCN populations, there is a low risk that GCN and other common amphibians may be harmed if present when construction begins.	Component	Likely effect (select one for each component; select the most harmful option if more than one is likely; lists are in order of harm, top to bottom)	Notional offence probability score	Great crested newt breeding pond(s)	No effect	0	Land within 100m of any breeding pond(s)	No effect	0	Land 100-250m from any breeding pond(s)	No effect	0	Land >250m from any breeding pond(s)	0.001 - 0.01 ha lost or damaged	0.0005	Individual great crested newts	No effect	0			Maximum:			0.0005	Rapid risk assessment result:	GREEN: OFFENCE HIGHLY UNLIKELY
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<i>Recommendations</i>	The precautionary working method laid out for reptiles will also protect GCN and common amphibians.
Badger	
<i>Summary of Survey Findings</i>	No evidence of badgers was found within 30m of the area of proposed works. Grassland, scrub and woodland on site can provide good foraging and commuting habitat for badgers. The connectivity between the site and local and wider landscape is good, with woodland and grassland being directly connected to the site.
<i>Foreseen Impacts</i>	The removal of 0.0054ha of neutral grassland is likely to be inconsequential to local badger populations owing to the small area and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.
<i>Recommendations</i>	Basic precautionary mitigation during works is recommended: • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to habitats which badgers could use. South and west boundaries. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified within 30m, works must cease and advice must be sought from a suitably qualified ecologist.
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>	For isolated habitats in the UK, research indicates that dormice require 20ha of woodland habitat to support a viable population (Bright <i>et al.</i> 1994). The site is connected to 20ha of woodland, and woodland and hedgerows provide optimal habitat for hazel dormouse to nest, forage, and commute.
<i>Foreseen Impacts</i>	No dormouse habitat will be removed during the proposed construction.
<i>Recommendations</i>	None.
Hedgehog	
<i>Summary of Survey Findings</i>	Grassland, scrub and woodland on site can provide good foraging and commuting habitat for hedgehogs. The connectivity between the site and local and wider landscape is good, with woodland and grassland being directly connected to the site.
<i>Foreseen Impacts</i>	The removal of 0.0054ha of neutral grassland is likely to be inconsequential to local hedgehog populations owing to the small area and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	The precautionary working method laid out for badgers will also protect hedgehogs.

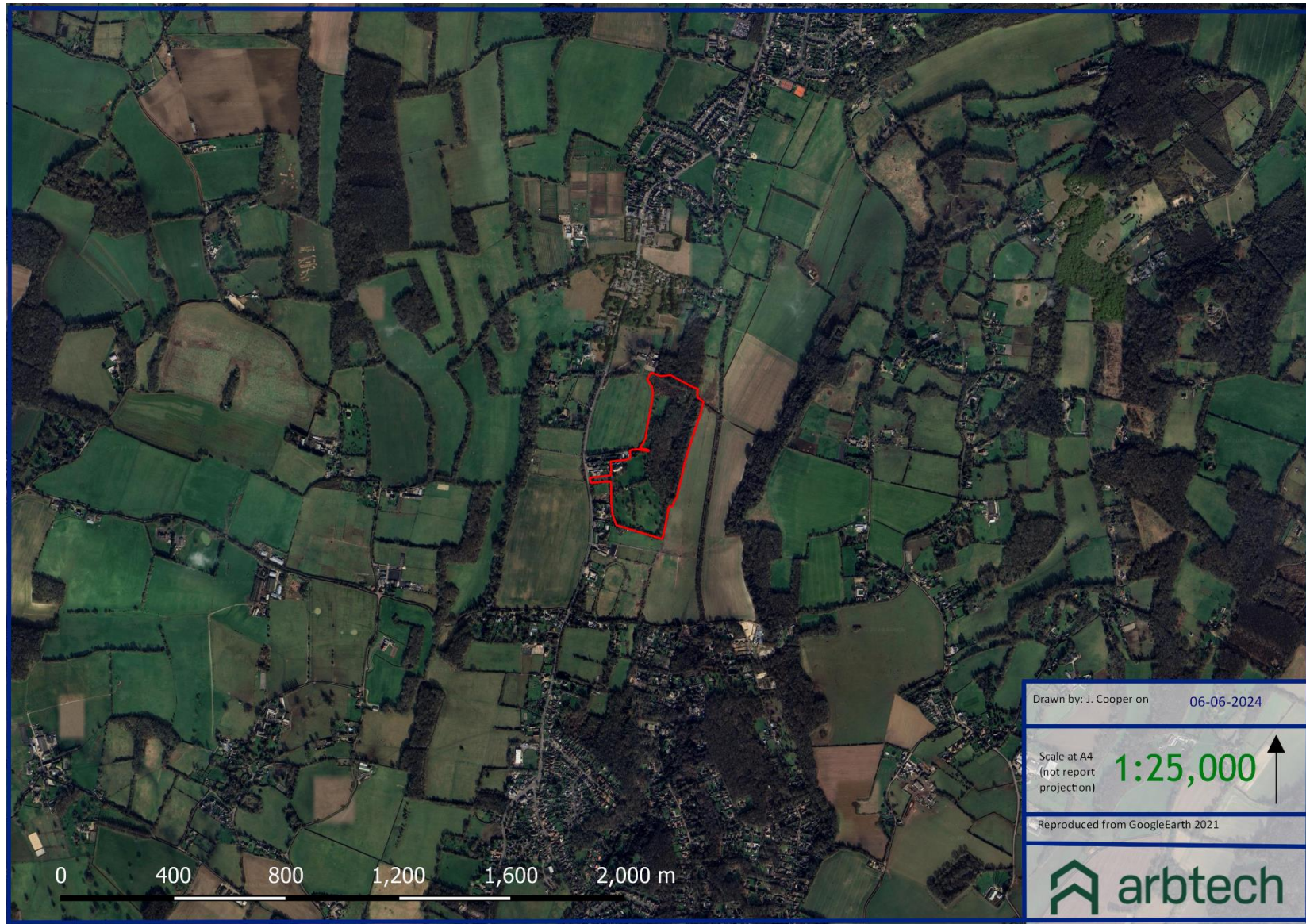
Appendix 1: Habitat map



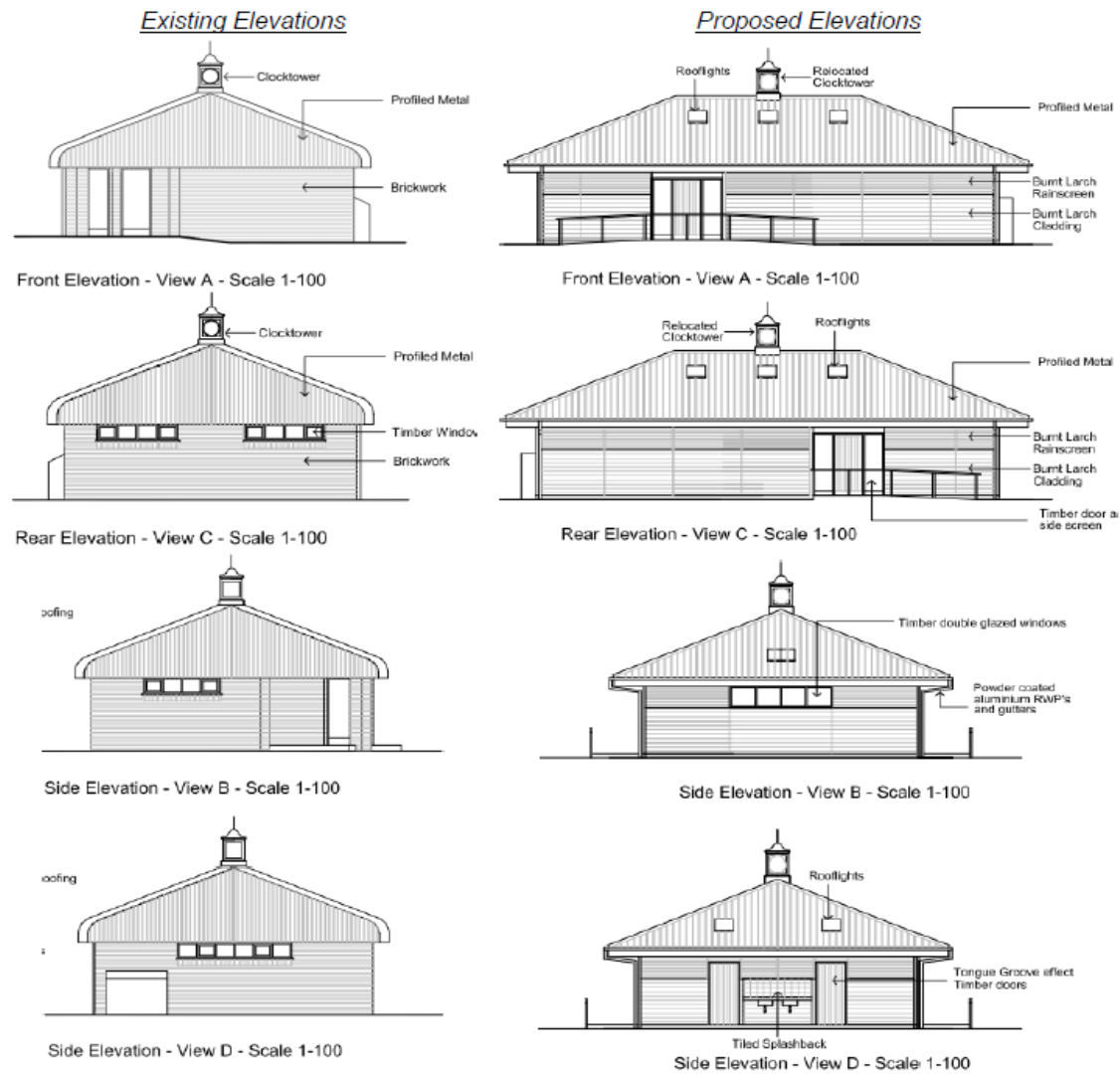
Appendix 2: PRA map



Appendix 3: Location map



Appendix 3: Proposed plan



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