

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Land at Spin Hill, Market Lavington, Devizes, Wiltshire, SN10 4NS

Client:

John Price

Survey date:

25th October 2024

Project:

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

Use of land for the stationing of caravans for residential use and the laying of hardstanding and erection of a dayroom ancillary to that use.

The survey results and recommendations contained within this report are valid for 18 months. An updated site visit may be required if the report is to be used any longer than 18 months after completion.

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 Jade Lemm BSc (Hons) DipHE MRSB (Natural England Protected Species Licence Numbers: Great Crested Newt (2023-11450-CL08-GCN) and accredited Agent on Natural England Bat Licence Number: 2018-33540-CLS-CLS.					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
25/10/2024	15	90%	100	1	Light rain

Ecological Survey Factor	Detailed using desk study and site survey. 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	
Limitations	The northern elevation of building B1 could not be observed due to its proximity to the site boundary. Building B2 could not be observed internally as it was sealed with tall forbs and bramble scrub.
Habitats and plants (see habitat map in Appendix 1, PRA plan in Appendix 2, BERS plan in Appendix 3, location plan in Appendix 4, Ponds within 500m in Appendix 5, proposed plans in Appendix 6 and photos in Appendix 7). Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).	
Summary of Survey Findings <u>UKHab codes used:</u> - <i>Deschampsia</i> neutral grassland with tall forbs, scattered trees and a line of trees g3c7 16 32 33	The site is located at National Grid Reference SU 00601 54871 and has an area of approximately 0.16ha comprising grassland, hardstanding, scrub, buildings and tall forbs. It is surrounded by deciduous woodland to the south (~35m), residential dwellings to the east and agricultural fields in all other directions. The wider landscape comprises pockets of woodland to the south and agricultural fields in all other directions. The soil within the site is slightly acidic and loamy.

- <i>Bramble scrub with scattered trees h3d 32</i> - <i>Developed land sealed surface u1b</i> - <i>Buildings u1b5</i> - <i>Built linear features u1e</i>	<u>Deschampsia neutral grassland with tall forbs, scattered trees and a line of trees [g3c7 16 32 33]</u> A large area (~0.091 ha) of the site was deschampsia-neutral grassland with tall forbs, a line of trees and scattered trees. The species are a poor representation of the grassland categorisation, with no areas of bare ground, invasive species and bracken. The sward height was varied throughout the site (1cm – 70cm). Large areas of scrub were throughout the grassland (~40%). Species composition includes tufted hair-grass (A), Yorkshire fog (A), white clover (A), false oat grass (F), ribwort plantain (F), broadleaved dock (F), silverweed (F), common hogweed (F), common bent grass (O), common broom (O), field sagewort (O), common nettle (O), white dead nettle (O), creeping thistle (O), creeping buttercup (O), wild strawberry (O) and large-flowered primrose (R). The grassland had nine immature scattered trees (T1, G2, G3, T4 – T6). Tree T1 was a semi-mature hawthorn (good health and ~20cm DBH) with no ecological niches and no evidence of human disturbance. Below the trees, there was scrub (>20% oversailing vegetation). Group of trees G2 were three immature (self-seeded) oak trees (good health and <7cm DBH) with no ecological niches and evidence of human disturbance. There was grassland below the tree (>20% oversailing vegetation). Group of trees G3 were two immature leylandii trees (good health and ~7cm DBH) with no ecological niches and evidence of human disturbance. Below the trees, there was grassland (>20% oversailing vegetation). Tree T4 was an immature oak (good health and ~10cm DBH) with no ecological niches and no evidence of human disturbance. Below the trees, there was scrub (>20% oversailing vegetation). Tree T5 was an immature oak (good health and ~15cm DBH) with no ecological niches and no evidence of human disturbance. Below the trees, there was scrub (>20% oversailing vegetation). Tree T6 was an immature leylandii (good health and ~10cm DBH) with no ecological niches and no evidence of human disturbance. Below the trees, there was scrub (>20% oversailing vegetation).
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	Areas of tall forbs were present on the western, northern and eastern boundaries. The species included rosebay willowherb (A), common nettle (A), thistle (O), and common hogweed (O). No Invasive species or varied vegetational structures were noted. A line of leylandii trees was noted on the site's southern boundary. The trees were healthy, and there were no gaps in the canopy. There was undisturbed vegetation on the site side of the line of trees. However, a regularly used agricultural road was immediately adjacent to the other side of the line of trees (high human disturbance). <u>Developed land, sealed surface [u1b]</u> The site has a ~30m² area of concrete hardstanding. <u>Buildings [u1b5]</u> One permanent building (B1) and one temporary structure (B2) are on the site. B1 is a small brick storage building with a corrugated roof. It has two doors and two windows. The building shows signs of wear, and exterior crevices were noted. B2 is a corrugated metal storage shed covered completely with bramble scrub and common nettles. No exterior crevices were noted.
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	<u>Bramble Scrub [h3d]</u> Areas of bramble scrub were found along the northern and western boundaries. The habitat does not have a condition score. <u>Built linear features [u1e]</u> Post and wire fences were found along the western, northern and eastern boundaries. <u>Local notable habitats</u> A range of notable local habitats within 2km of the site. These include: - Deciduous woodland ~35m south - Ancient Replanted Woodland ~350m south - Wood-pasture and Parkland ~350m south - Traditional orchard ~600m south-west - Ancient & Semi-Natural Woodland ~725m north
<i>Foreseen Impacts</i>	No direct impacts to any notable habitats are anticipated due to the small scale of the proposed development. However, due to the close proximity of the proposed development, which is 35m away from priority habitat woodland, despite being across the other side of a road, there is low potential for indirect disturbance such as tree or hedgerow damage (pollution) that could occur during construction.
<i>Recommendations</i>	Best practice measures to minimise the possibility of pollution affecting the nearby deciduous woodland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.

	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). A biodiversity net gain (BNG) report is likely to be required for the proposal as the development is more than 25m².
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	The site is not subject to any designation, and there are no known statutory sites nearby.
<i>Foreseen Impacts</i>	No impacts foreseen.
<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>	The grassland, tall forbs and bramble scrub will likely provide a diverse assemblage of common invertebrates.
<i>Foreseen Impacts</i>	Grassland, tall forbs, and bramble scrub will be removed during construction. Owing to the presence of more extensive habitat locally, the loss of such habitats is likely to be inconsequential to local invertebrate populations.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	Bats could use the bramble scrub, tall forbs and other neutral grassland on-site for foraging and the line of trees for commuting. There are numerous agricultural fields, small pockets of woodland, hedgerows and trees within the local environment, all of which are favourable habitats for foraging and commuting bats. Building B1 was considered to

have roosting value. Building B2 and the nine scattered trees (T1, G2, G3 T4 - T6) were not identified to have any potential roosting features.

Building B1 (confirmed roost – high habitat value)

B1 is a confirmed bat roost due to the presence of four scattered droppings within the building (circled in red). The building was vaulted (no void), and the ceiling was lined with wood sarking.





External and internal features may provide roosting opportunities for crevice-dwelling and void-dwelling bats and conceal further evidence of roosting bats. The external roosting and access features of B1 include:

- Ivy growth (circled in yellow)
- Gaps underneath boarding (circled in orange)
- Open/broken windows (circled in green)
- Open/missing doors (circled in purple)
- Gaps underneath corrugated sheeting (circled in pink)
- Gaps underneath fascia boarding (circled in blue)





B1 was of high habitat value due to its suitable roosting features and access points, as well as its optimal habitats and lack of street lighting in the surrounding area (less light spill).

Building B2 (negligible value – no evidence)

There was no evidence of roosting bats during the B2 survey (externally). The building was considered negligible as it lacked suitability for crevice and loft-dwelling bats due to the lack of access points (well-sealed) and the temperature fluctuation due to its nature (corrugated metal).

	 All nine trees (T1, G2, G3, T4 – T6) were in good structural condition and well-sealed with no potential roosting features or access points (Appendix 7, photographs 5 – 7). There are three identified bats European Protected Species License (EPSL) within 2km, including: - 2018-36998-EPS-MIT – 1.15km east - brown long-eared bat – damage to a resting place - 2017-30871-EPS-MIT – 1.2km south - brown long-eared bat and common pipistrelle – destruction of a resting place - 2015-17761-EPS-MIT – 1.4km east - Natterer's bat – destruction of a breeding site and destruction of a resting place
<i>Foreseen Impacts</i>	<u>Building B1</u> As the proposals include the demolition of B1 and B2, any bat roosts within B1 will be destroyed. This could also result in death or injury of bats.

	<u>Building B2 and scattered trees</u> Bats are very unlikely to be roosting within building B2 and scattered trees. As such, there are not anticipated to be any impacts on roosting bats as a result of the demolition of this building. <u>Lighting</u> The proposed development may increase the current lighting of surrounding habitats, which may disturb commuting bats.
<i>Recommendations</i>	<u>Building B1</u> 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. Two 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. <u>Building B2 and scattered trees</u> In the unlikely event that a bat or evidence of bats is discovered during the development all work must stop and a bat licensed ecologist contacted for further advice. <u>Lighting and enhancements</u> Lighting mitigation may be required based on the outcome of the night bat surveys. Enhancements are dependent on the outcome of further surveys.
Birds	
<i>Summary of Survey Findings</i>	A disused bird's nest (TN1) was found in building B1 (Appendix 7, photograph 9). The suitable habitat on site consists of scattered trees, bramble scrub and a line of trees, as well as the grassland for ground-nesting birds.
<i>Foreseen Impacts</i>	The proposed development could result in the destruction, disturbance, and subsequent abandonment of active bird nests.
<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.

	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.
Reptiles	
<i>Summary of Survey Findings</i>	The site has suitable basking, foraging and sheltering opportunities (other neutral grassland, bramble scrub and tall forbs). There were areas of rubbish scattered throughout the site (tyres, bricks and bottles) that could provide sheltering opportunities. No EPSL's for reptiles were identified within 2km of the site.
<i>Foreseen Impacts</i>	The proposed development will result in the loss of other neutral grassland, bramble scrub, tall forbs, and two scattered trees. The loss of such habitats could result in a reduction in reptile habitat and could result in the fragmentation of the local landscape. Furthermore, site clearance could result in the death or injury of reptiles, if present.
<i>Recommendations</i>	Reptile surveys will be required to determine presence or likely absence of reptiles on the site. This will comprise the deployment and monitoring of artificial refugia over seven visits and such surveys must be undertaken between April, May and September, in accordance with current survey guidelines (Gent & Gibson, 2003).
Amphibians	
<i>Summary of Survey Findings</i>	Similarly to reptiles, the site contains suitable terrestrial habitats for foraging and sheltering opportunities (other neutral grassland, bramble scrub and tall forbs). There were areas of rubbish scattered throughout the site (tyres, bricks and bottles) that could provide sheltering opportunities.

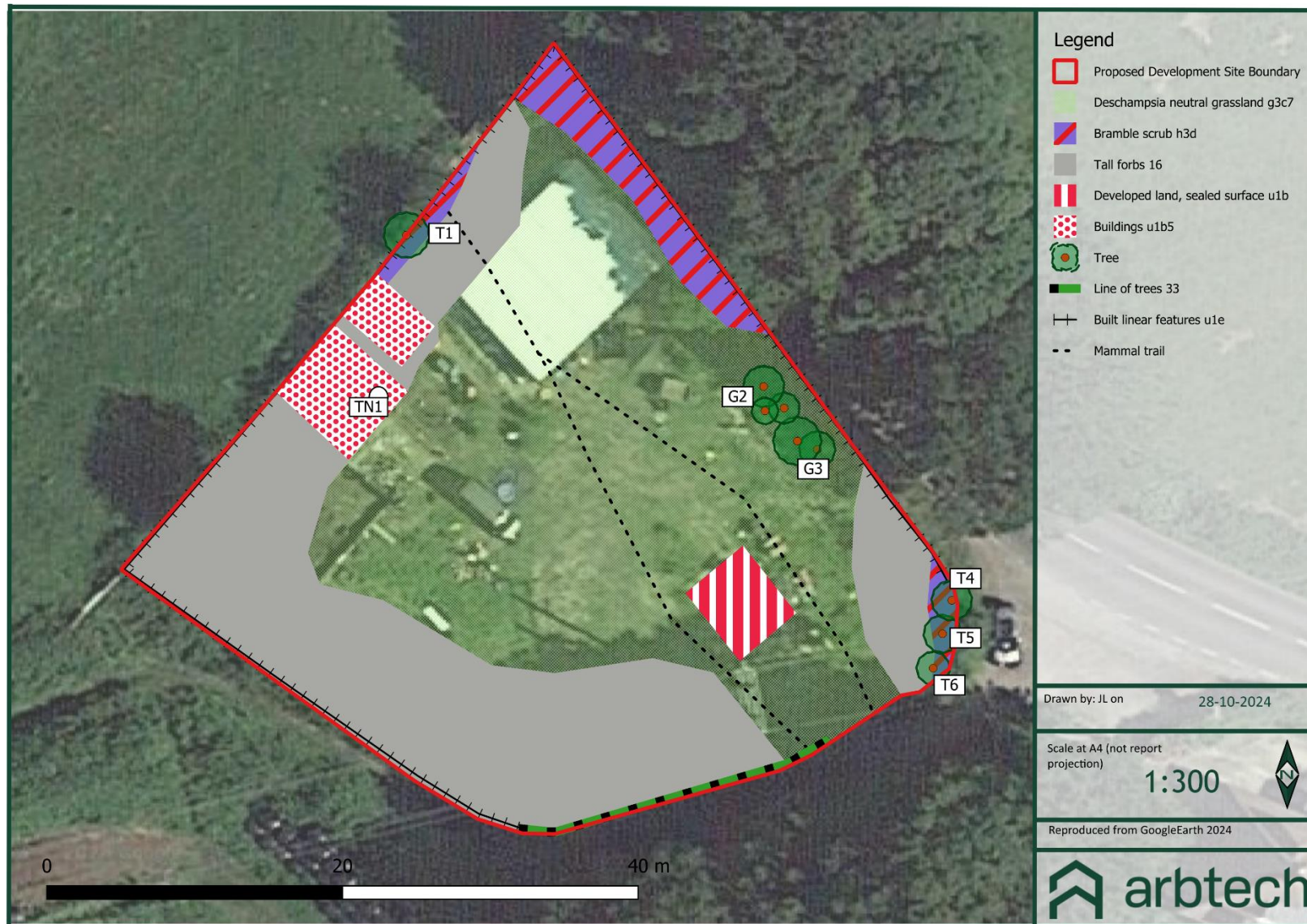
	However, amphibians also require suitable aquatic habitat in which to breed. There is one known pond within 500m of the site boundary when consulting OS maps (300m west). The pond was located on private land, so it could not be accessed, and an HSI was not possible. Well-managed and cattle-grazed fields separate it. These fields are highly disturbed by the regular footfall. This landscape feature likely represents a barrier to dispersal, reducing the connectivity of amphibians to the site. There are no Great Crested Newt (GCN) European Protected Species License (EPSL) returns and two GCN pond survey results within 2km, including: - GCN absent ~675m west - GCN absent ~2km north-west
<i>Foreseen Impacts</i>	For the nearest pond off-site (450m east from the site boundary), a Natural England Rapid Risk Assessment was undertaken for the proposed works to the site. The risk assessment assumes that great crested newts are present in the nearest inaccessible pond and the disturbance of 0.46ha of habitat and returned a result of 'Green: Offence unlikely' for the proposed development works (Natural England, 2016)¹. The proposed development will result in the loss of other neutral grassland, bramble scrub, tall forbs, and two scattered trees. Albeit low, there is a potential for impacts on amphibians commuting through the site.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread amphibians during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage amphibians.

¹ Natural England (2016) Great Crested Newts: Surveys and Mitigation for Development Projects – Standing Advice. Online at: <https://www.gov.uk/government/publications/great-crested-newts-apply-for-a-mitigation-licence> (Accessed October 2024).

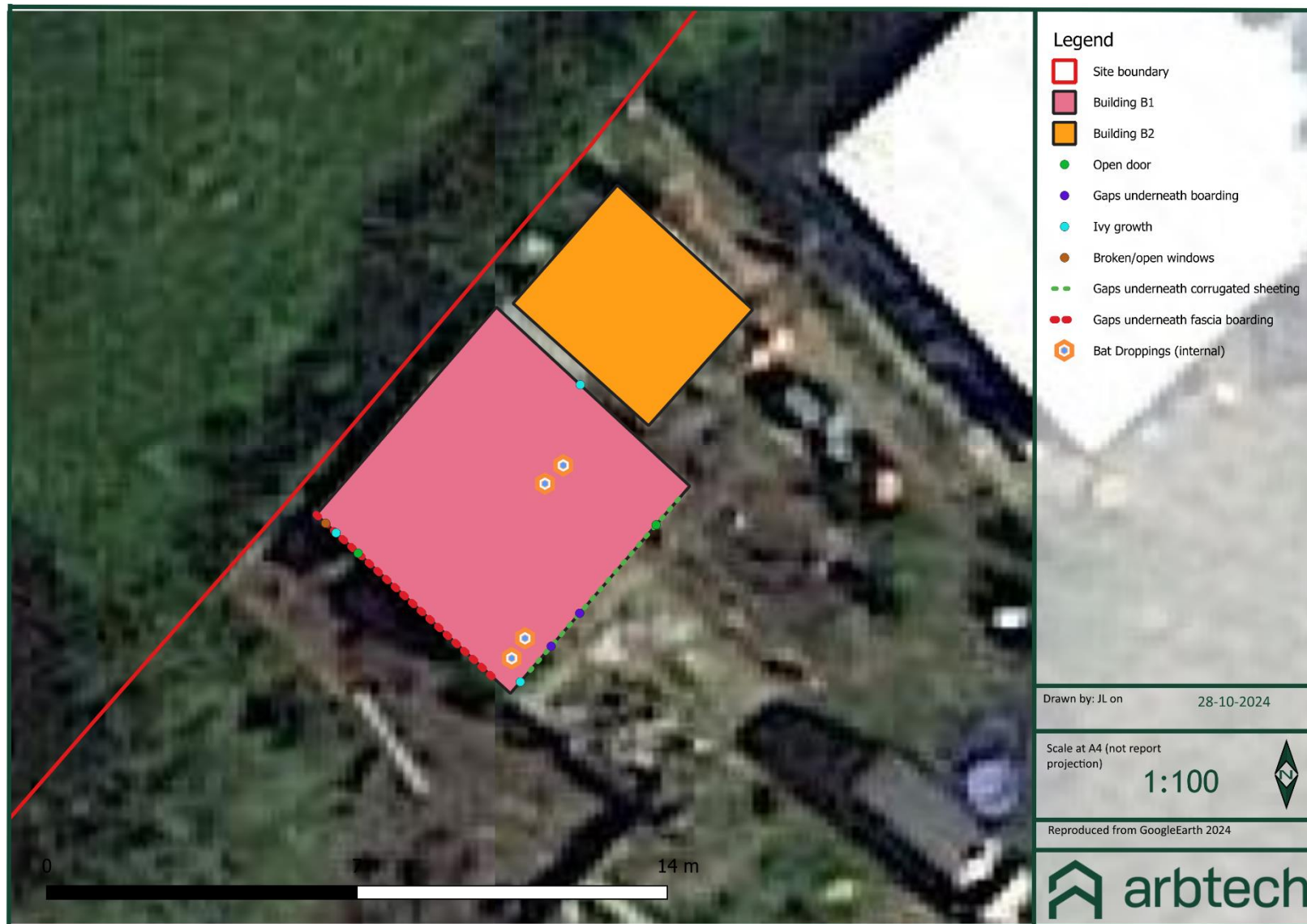
	- Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. - Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. - If any common amphibians 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. - In the unlikely event that a great crested newt is identified, works must cease and advice must be sought from a suitably qualified ecologist.
Badger	
<i>Summary of Survey Findings</i>	From the survey and aerial imagery, no sett-making activity, latrines or feeding activity was observed within the site boundary or 30m of the development boundary. Badgers will likely use the proposed development site for foraging and commuting (mammal paths).
<i>Foreseen Impacts</i>	No direct impacts on badgers are anticipated as a result of the proposed development. However, badgers could commute through the site and get stuck in any excavations (if any) during the construction phase.
<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>	N/A
Hazel dormouse	
<i>Summary of Survey Findings</i>	The bramble scrub could provide suitable foraging opportunities for dormice. However, the site is not connected to any woodland in the local area. There are no dormouse European Protected Species License (EPSL) within 2km.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	The tall forbs, other neutral grassland and bramble scrub provide foraging opportunities for hedgehogs, and the line of trees provides a commuting habitat.
<i>Foreseen Impacts</i>	The proposed development will result in the loss of other neutral grassland, bramble scrub, tall forbs and two of the scattered trees. Therefore, the construction activities could result in the death or injury of hedgehogs, if present.
<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.

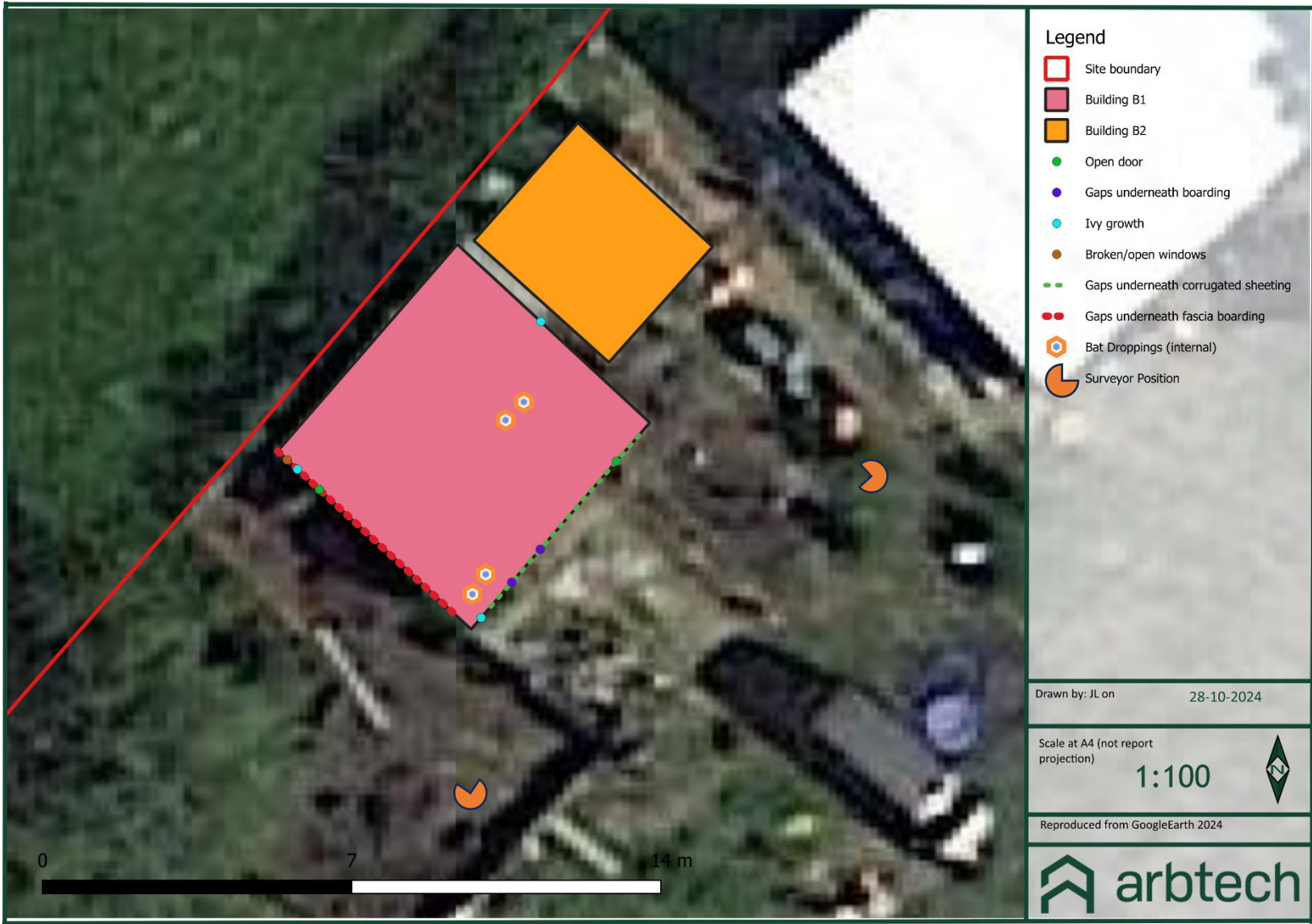
	• The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. 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.
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Appendix 1: Habitat map

Appendix 2: PRA Plan



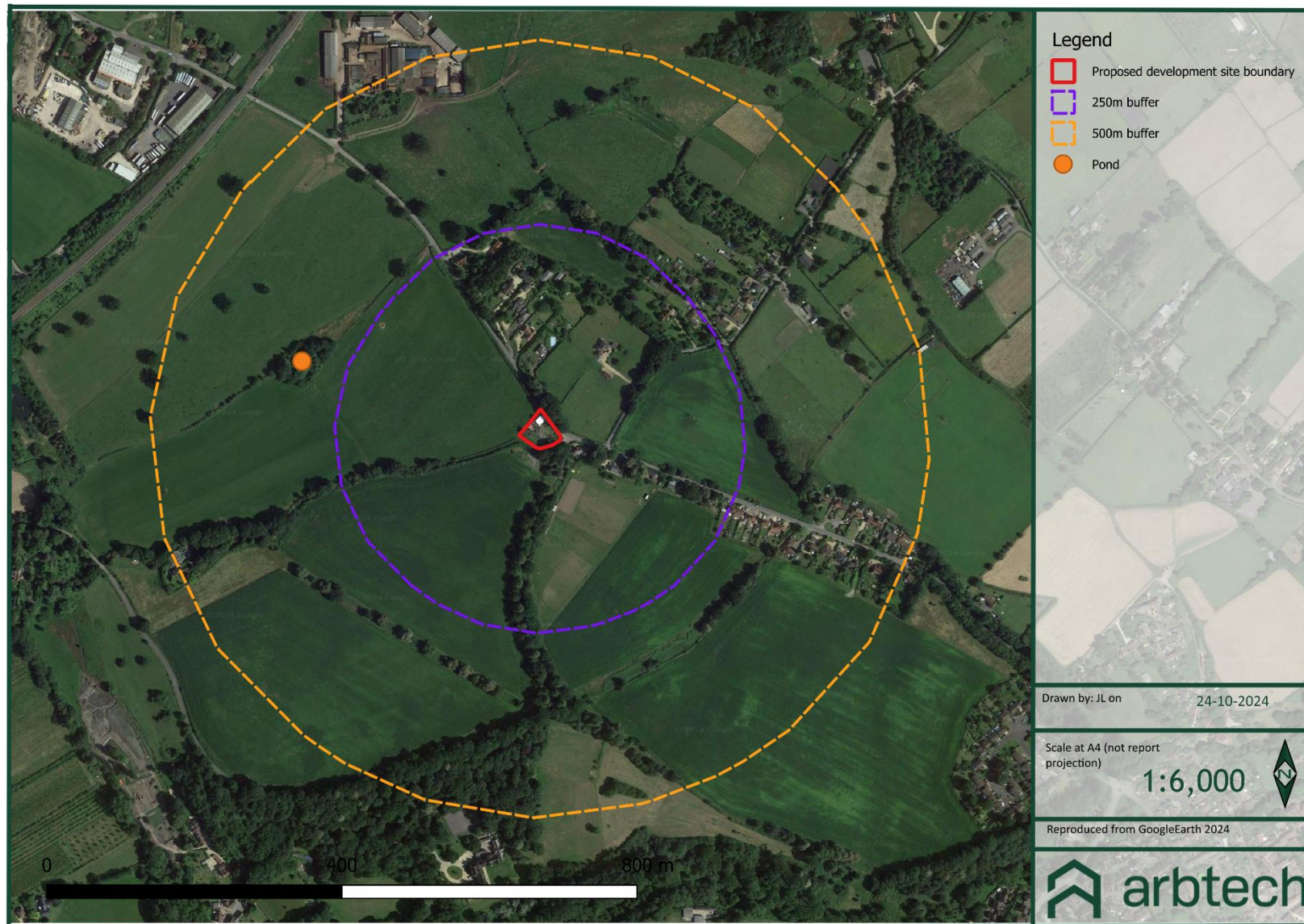
Appendix 3: BERS Plan



Appendix 4: Location map



Appendix 5: Ponds within 500m



[illegible]

Appendix 7: Photos



Photo 1: Looking north at the other neutral grassland and developed land.



Photo 2: Looking at the bramble scrub and oak (self-seeded) saplings.



Photo 3: Looking at the tall forbs.



Photo 4: Looking south at the line of trees.



Photo 5: Looking east at the groups of trees G2 and G3.



Photo 6: Looking north at tree T1.



Photo 7: Looking southeast at trees T4 – T6, bramble scrub and tall forbs.



Photo 8: Looking west at the other neutral grassland.

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Land at Spin Hill, Market Lavington, Devizes, Wiltshire, SN10 4NS



Photo 9: TN1 bird nest found within building B1.

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