

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

171 Victoria Road, Wargrave, Reading, Wokingham, Berkshire, RG10 8AH

Client:

Claudia Cledwyn

Survey date:

18th March 2025

Project:

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

The demolition of the existing (single-storey) extension and then the construction of a new (single-storey) on the northern elevation. The development will also include partial demolition and the raising of the southern elevation porch to facilitate the conversion of the garage into a utility room.

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
18/03/2025	16	32	0	5	None

Ecological Survey Factor	Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within the 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, PRA plan (1/2) in Appendix 2, PRA plan (1/2) in Appendix 3, BERS plan in Appendix 4, location plan 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>Site context and background</u> The site is located at National Grid Reference SU 79477 78884 and has an area of approximately 0.05ha comprising grassland, scattered trees, hedgerows, introduced shrubs, buildings and hardstanding. The site has freely draining, slightly acidic, loamy soils. It is immediately surrounded by other residential dwellings with associated amenity gardens. The wider landscape comprises Wargrave recreational grounds ~75m south, agricultural fields ~120m north-east, allotments ~300m south-west, lake ~525m north-west, pockets of deciduous woodland ~440m east and River Thames ~950m west. To the author’s knowledge, no previous ecology reports have been produced for this site.
<u>UKHab codes used</u> - Modified grassland with scattered trees and introduced shrubs g4 32 847 - Native hedgerow h2a - Non-native and ornamental hedgerow h2b	

- <i>Developed land sealed surface u1b</i> - <i>Buildings u1b5</i> - <i>Artificial unvegetated unsealed surface u1c</i>	<u>Local notable habitats</u> A range of notable local habitats within 2km of the site. These include: - Traditional orchard ~75m south - Deciduous woodland ~440m east - Ancient & Semi-Natural Woodland ~450m east - Wood-pasture and Parkland ~600m north-west <u>Habitats</u> <u>Modified grassland with scattered trees and introduced shrubs g4 32 847</u> An area of modified grassland with scattered trees and introduced shrubs was present in the northern part of the site. The grassland had less than 10% bare ground (~5%) and a sward height of 1-3 cm. The species composition included perennial ryegrass (D), white clover (A), club spike moss (F), Yorkshire fog (O), Ragwort (O) and ground ivy (R). No scrub or bracken was identified within the grassland. The survey noted moderate levels of footfall on the grassland from the owners' regular use and management of the garden. Approximately 18 m² of introduced shrubs were present throughout the site. The species composition included daffodils (F), tulips (F), ornamental grasses (O), Jasmine sp. (O), magnolia sp. (O) and lords & ladies (R). Five scattered trees (T1 – T5) were present in the northern part of the site. - T1 was a semi-mature cherry tree of medium size (~3.5m height and ~40cm Diameter Breast Height) with no ecological niches or evidence of human disturbance. The tree is oversailing grassland vegetation (>20%).
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	- T2 was an immature cherry tree of small size (~3m height and ~25cm Diameter Breast Height) with no ecological niches or evidence of human disturbance. The tree is oversailing grassland vegetation (>20%). - T3 was an immature cherry tree of small size (~3m height and ~15cm Diameter Breast Height) with no ecological niches or evidence of human disturbance. The tree is oversailing grassland vegetation (>20%). - T4 was an immature yew tree of small size (~2.5m height and ~15cm Diameter Breast Height) with no ecological niches or evidence of human disturbance. The tree is oversailing grassland vegetation (>20%). - T5 was a semi-mature cherry laurel of medium size (~3m height and ~40cm Diameter Breast Height) with no ecological niches or evidence of human disturbance. The tree is oversailing grassland vegetation (>20%). <u>Native hedgerow h2a</u> Sections of native hedgerows were present on the southern boundary of the site (H2 and H3). - Hedgerow H2 (approximately 3m length x 2m height x 1m wide) was present on the south-eastern boundary. The hedgerow had no canopy gaps (<0.5m canopy to base gap), and no invasive species. Species composition included yew (D). The understorey was comprised of hardcore with no vegetation. - Hedgerow H3 (approximately 1.5m length x 1.5m height x 1m wide) was present on the south-eastern boundary. The hedgerow had no canopy gaps (<0.5m canopy to base gap), and no invasive species. Species composition included yew (D). The understorey was comprised of hardcore with no vegetation. <u>Non-native and ornamental hedgerow h2b</u> A section of non-native hedgerow H1 (approximately 3.5m height x 10m length x 1m width) was present on the western boundary of the site. The species composition was dominated by cherry laurel.
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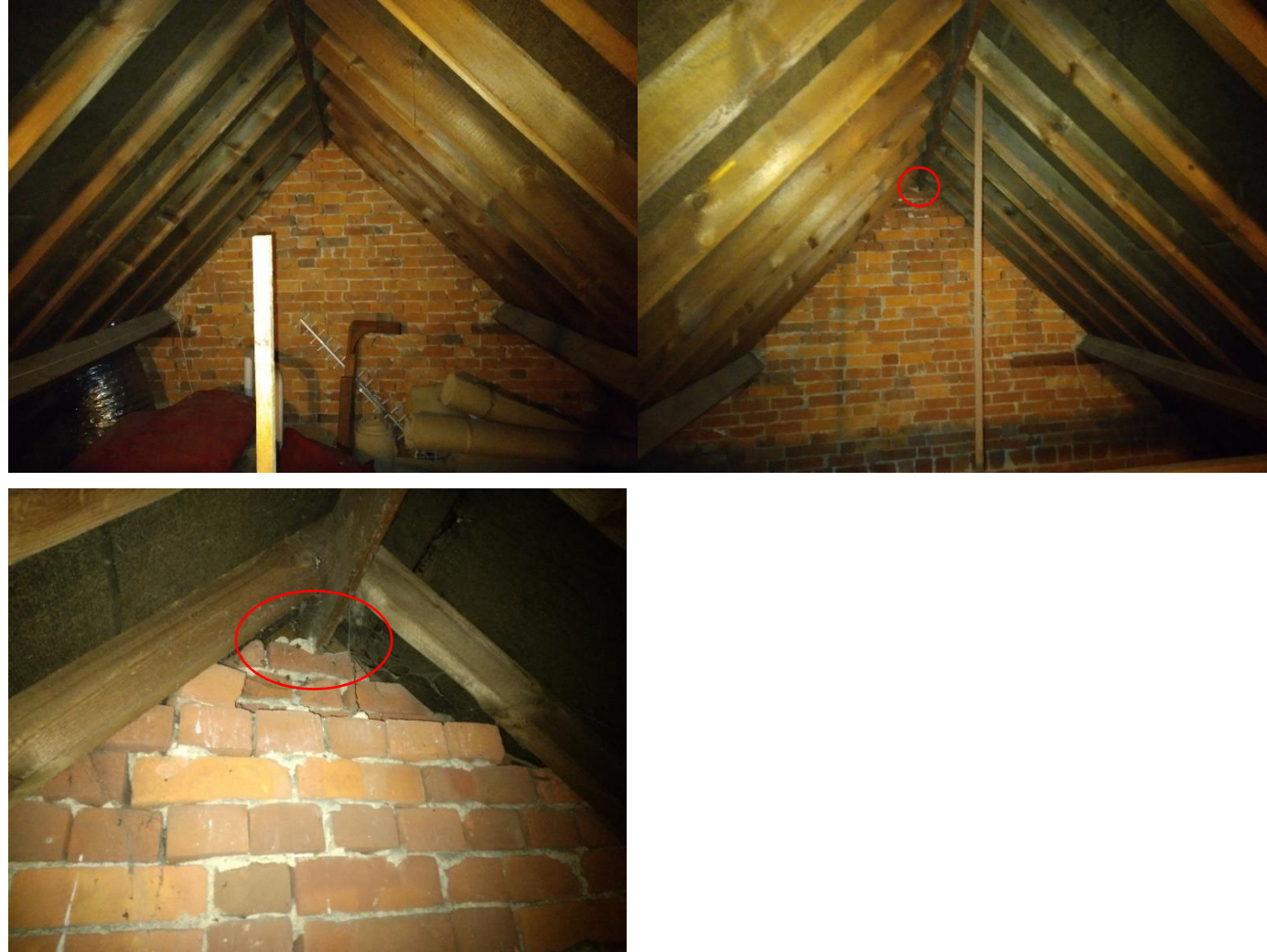
	<u>Developed land sealed surface u1b</u> The areas (approximately 100m²) surrounding the building included a garden patio and concrete paths. <u>Buildings u1b5</u> There were three designated buildings on site (B1 – B3). Building B1 was divided into two sections (B1 and B1b). <u>Artificial unvegetated unsealed surface u1c</u> An area (approximately 25m²) of hardcore driveway was present on the southern part of the site.
<i>Foreseen Impacts</i>	The site contains hedgerows, which are listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). Further notable habitats are present within 2km. Other habitats within the site are common and widespread and have low ecological value. All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. No direct impacts on any notable habitats are expected to occur as a result of the proposed development. However, due to the proximity of the site to the habitat type, indirect effects such as pollution or damage to hedgerows could occur during construction.
<i>Recommendations</i>	Retained hedgerows and 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). Best practice measures to minimise the possibility of pollution must be implemented during construction. A biodiversity net gain (BNG) report is unlikely to be required for the proposal, as less than 25m² of habitat is affected by the proposal (one of the exemptions).

Locality and Designated Sites	
<i>Summary of Survey Findings</i>	The site is not subject to any designation, and there are no known designations within 2km of it. It lies within the impact risk zone for SSSIs. However, the proposed development type is not listed as a possible high risk for this designation.
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. No impacts to designated sites are anticipated due to the small scale and distance of the proposed development from such sites (where known), as well as the urban location of the site with surrounding physical barriers.
<i>Recommendations</i>	Retained hedgerows and 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). Best practice measures to minimise the possibility of pollution must be implemented during construction.
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, scattered trees, hedgerows and introduced shrubs will likely provide a diverse assemblage of common invertebrates.
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. No impacts are anticipated on notable species or populations of invertebrates as a result of the proposed development.
<i>Recommendations</i>	No further surveys.

Bats	
Summary of Survey Findings	The site has introduced shrubs, amenity grassland, hedgerows, and scattered trees, which are suitable habitats for bats. The wider habitats encompass numerous agricultural fields, grasslands, hedgerows, traditional orchards, and diverse tree species. All these features are favourable habitats for foraging and commuting bats. However, the immediate area is surrounded by residential dwellings and streetlamps (increased artificial light). Therefore, the site has low habitat value for foraging and commuting bats. <u>Building B1a (no evidence – low roost suitability)</u> Building B1 was divided into two sections (B1 and B1b). B1a is a two-storey (brick-built) residential dwelling with a multi-level pitched and hipped (flat concrete tile) roof. It has a small single-storey extension on the northern elevation (B1b). The building has one garage door, two main doors, twelve windows, one chimney and one skylight. The building exhibited signs of wear, resulting in exterior crevices and access points. Due to the building's roof shape and the close proximity of neighbouring buildings, the eastern pitch was not fully visible. Therefore, some roost features may have been missed. However, the proposed development is restricted to the first storey of the building and will not impact the second-storey roof. No evidence of bats was found during the internal survey. The building features two loft voids on the second storey, designated as LV1 and LV2. There are no separate voids within the first storey of B1a, as shown below.



The first loft void (LV1) extended on the eastern part of the roof. It was 2m in height (at the peak), 5m wide and 6m long. The loft void was lined with excellent-condition Bitumen felt. There was one area of light spill from a gap at the southern gable end (circled in red). The internal temperature of the void was 12°C, and the humidity was 53%.



The second loft void (LV2) extended on the western part of the roof. It was 2m in height (at the peak), 5m wide and 6m long. The loft void was lined with excellent-condition Bitumen felt. There were areas of light spill from the ventilation around the edges of the roof (circled in red). The internal temperature of the void was 13°C, and the humidity was 66%.





External features may provide roosting opportunities for crevice-dwelling bats, access features for void-dwelling bats and conceal further evidence of roosting bats.

The external roosting and access features of B1a include:

- Lifted, slipped or missing tiles (circled in orange)
- Gap between the brickwork and soffit box/fascia board (circled in pink)

Southern elevation





Western elevation



Northern elevation





B1a had low roost suitability due to the presence of a small number of suitable roosting features and access points, as well as the proximity of the traditional orchards in the local area.

Building B1b (no evidence – low roost suitability)

Building B1b is a single-storey (brick-built) extension with a hipped (flat concrete tile) roof. It was attached to the northern elevation of B1a. It had one bi-folding door and two windows. There was no evidence of roosting bats during the survey of B1b (either internally or externally). There was one void within B1b. However, there was no access to the void (sealed off as shown below).



External features may provide roosting opportunities for crevice-dwelling bats, access features for void-dwelling bats and conceal further evidence of roosting bats.

The external roosting and access features of B1a include:

- Lifted, slipped or missing tiles (circled in orange)
- Gap between the brickwork and soffit box/fascia board (circled in pink)

Western elevation



Northern elevation



Eastern elevation



B1b had low roost suitability due to the presence of a small number of suitable roosting features and access points, as well as the proximity of the traditional orchards in the local area.

Building B2 (no evidence – negligible roost suitability)

B2 is a small wooden summerhouse with a pitched felt roof. No exterior crevices were noted, and the building was considered negligible as it lacked suitability for crevice and loft-dwelling bats (well-sealed, light spill, and temperature fluctuation). Building B2 is currently not included in the proposed plans.



Building B3 (no evidence – negligible roost suitability)

B3 is a small wooden shed with a pitched felt roof. No exterior crevices were noted, and the building was considered negligible as it lacked suitability for crevice and loft-dwelling bats (well-sealed). Building B3 is currently not included in the proposed plans.



Tree T1 (Potential roosting value - None)

T1 was a semi-mature cherry tree of medium size (~3.5m height and ~40cm DBH) with no ecological niches or evidence of human disturbance. The tree has an excellent natural form and appears in good condition. However, due to its size and age, it does not seem to have suitable roosting features. Tree T1 is currently not included in the proposed plans.

Tree T2 (Potential roosting value - None)

T2 was an immature cherry tree of small size (~3m height and ~25cm DBH) with no ecological niches or evidence of human disturbance. The tree has an excellent natural form and appears in good condition. However, due to its size and age, it does not seem to have suitable roosting features. Tree T2 is currently not included in the proposed plans.



Tree T3 (Potential roosting value - None)

T3 was an immature cherry tree of small size (~3m height and ~15cm DBH) with no ecological niches or evidence of human disturbance. The tree has an excellent natural form and appears in good condition. However, due to its size and age, it does not seem to have suitable roosting features. Tree T3 is currently not included in the proposed plans.



Tree T4 (Potential roosting value - None)

T4 was an immature yew tree of small size (~2.5m height and ~15cm DBH) with no ecological niches or evidence of human disturbance. The tree has an excellent natural form and appears in good condition. However, due to its size and age, it does not seem to have suitable roosting features. Tree T4 is currently not included in the proposed plans.



Tree T5 (Potential roosting value - None)

T5 was a semi-mature cherry tree of medium size (~3m height and ~40cm DBH) with no ecological niches or evidence of human disturbance. The tree has an excellent natural form and appears in good condition. However, due to its size and age, it does not seem to have suitable roosting features. Tree T5 is currently not included in the proposed plans. Due to a technical error, no pictures of tree T5 were recorded.

Eight bat European Protected Species Licenses (EPSLs) are within 2km. Details are summarised below.

EPSL reference	Bat species affected	Impacts allowed by the licence
2018-35667-EPS-MIT (900m east)	Common pipistrelle	Destruction of a resting place.

	EPSM2009-1439 (1.25km north-east)	Common pipistrelle, soprano pipistrelle, brown long-eared bat and Natterers bat	Destruction of a resting place.
	2015-7300-EPS-MIT (1.35km north-west)	Common pipistrelle, soprano pipistrelle and brown long-eared bat	Destruction of a resting place.
	EPSM2012-4004 (1.4km west)	Soprano pipistrelle	Destruction of a resting place.
	2015-7819-EPS-MIT 1.7km west)	Common pipistrelle and Soprano pipistrelle	Destruction of a resting place.
	2020-45673-EPS-MIT-1 (1.8km east)	Soprano pipistrelle	Destruction of a resting place.
	EPSM2013-6116 (1.75km north)	Brown long-eared bat	Destruction of a resting place.
	2019-41331-EPS-MIT (1.95km north-east)	Common pipistrelle and Soprano pipistrelle	Destruction of a resting place.
<i>Foreseen Impacts</i>	<u>Building B1 (B1a and B1b)</u> The proposed development will result in the demolition of B1b and the partial demolition of B1a (the porch over the garage) to facilitate the conversion of the garage. This could result in damage, modification, or destruction of any bat roosts present and could cause disturbance, death, or injury to bats.		

	The proposed development may lead to an increase in the amount of current lighting of surrounding habitats. This may disturb commuting bats.
<i>Recommendations</i>	<u>Building B1 (B1a and B1b)</u> One bat emergence or re-entry survey is required during the active bat season (optimal May to August, suboptimal September) to confirm the presence or likely absence of a bat roost in the building. Infra-red cameras should be used as an aid. Three surveyors are required to provide full coverage of the building (B1). If the absence of a bat roost cannot be determined during the first visit, then further surveys will be required. If bat roosts are confirmed in the building two additional surveys may be required to characterise the roost and to inform an EPSL application to Natural England. Surveys should be a minimum of three weeks apart. 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. Lighting mitigation may be required based on the outcome of the night bat survey. Enhancements are dependent on the outcome of further survey.
Birds	
<i>Summary of Survey Findings</i>	No evidence of nesting birds was found on-site during the surveys. However, birds could use the buildings, scattered trees and hedgerows for nesting. No habitat for schedule 1 birds or ground-nesting birds were observed.

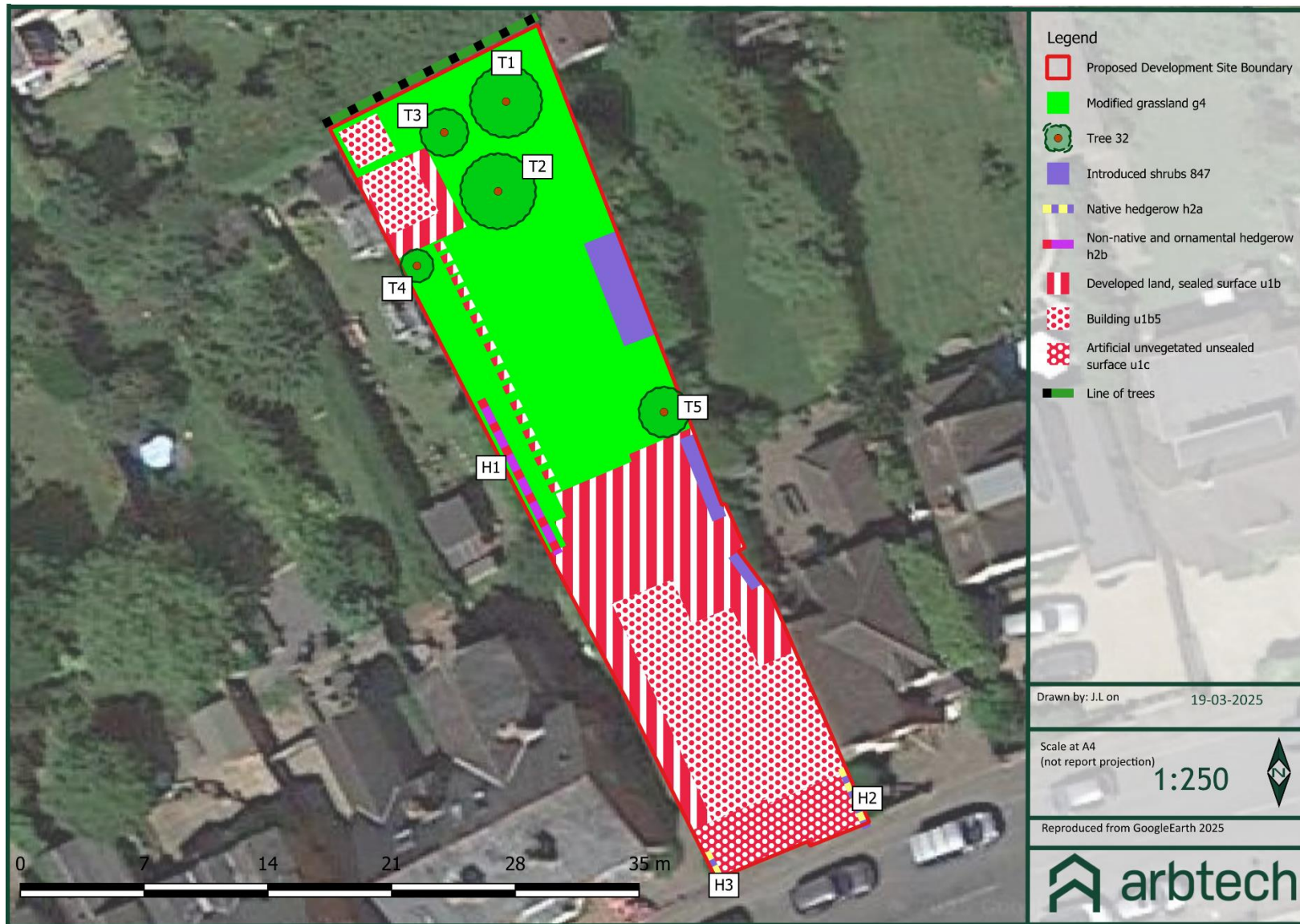
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. The proposed development could result in the destruction or disturbance of active bird nests, leading to their subsequent abandonment.
<i>Recommendations</i>	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 suitable reptile habitats on site consist of introduced shrubs and hedgerows that provide shelter opportunities. The grassland offers suitable commuting opportunities. However, these habitats are suboptimal due to the regular foot traffic (amenity garden), regular maintenance (mowing), and urban infrastructure surrounding the site (residential dwellings and roads). The site is situated in an urban area, surrounded by walls and fencing. This will reduce connectivity to the site (poorly connected to the wider landscape).
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. Although no areas of suitable habitat are 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 (individuals commuting through the site). These could be injured or killed without mitigation.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:

	• Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • 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. 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>	Similarly, to reptiles, the suitable habitats on site consist of introduced shrubs and hedgerows for sheltering opportunities. The grassland offers suitable commuting opportunities. However, these habitats are suboptimal due to the regular foot traffic (amenity garden), regular maintenance (mowing), and urban infrastructure surrounding the site (residential dwellings and roads). Due to the urban surroundings, the development area is poorly connected to the wider landscape. However, amphibians also require suitable aquatic habitats to breed and complete their life cycle. There are no known ponds 500m when consulting OS maps. Therefore, protected amphibians are likely to be absent around the survey site year-round. No Great Crested Newt European Protected Species Licenses (EPSLs) are within 2 km of the site.

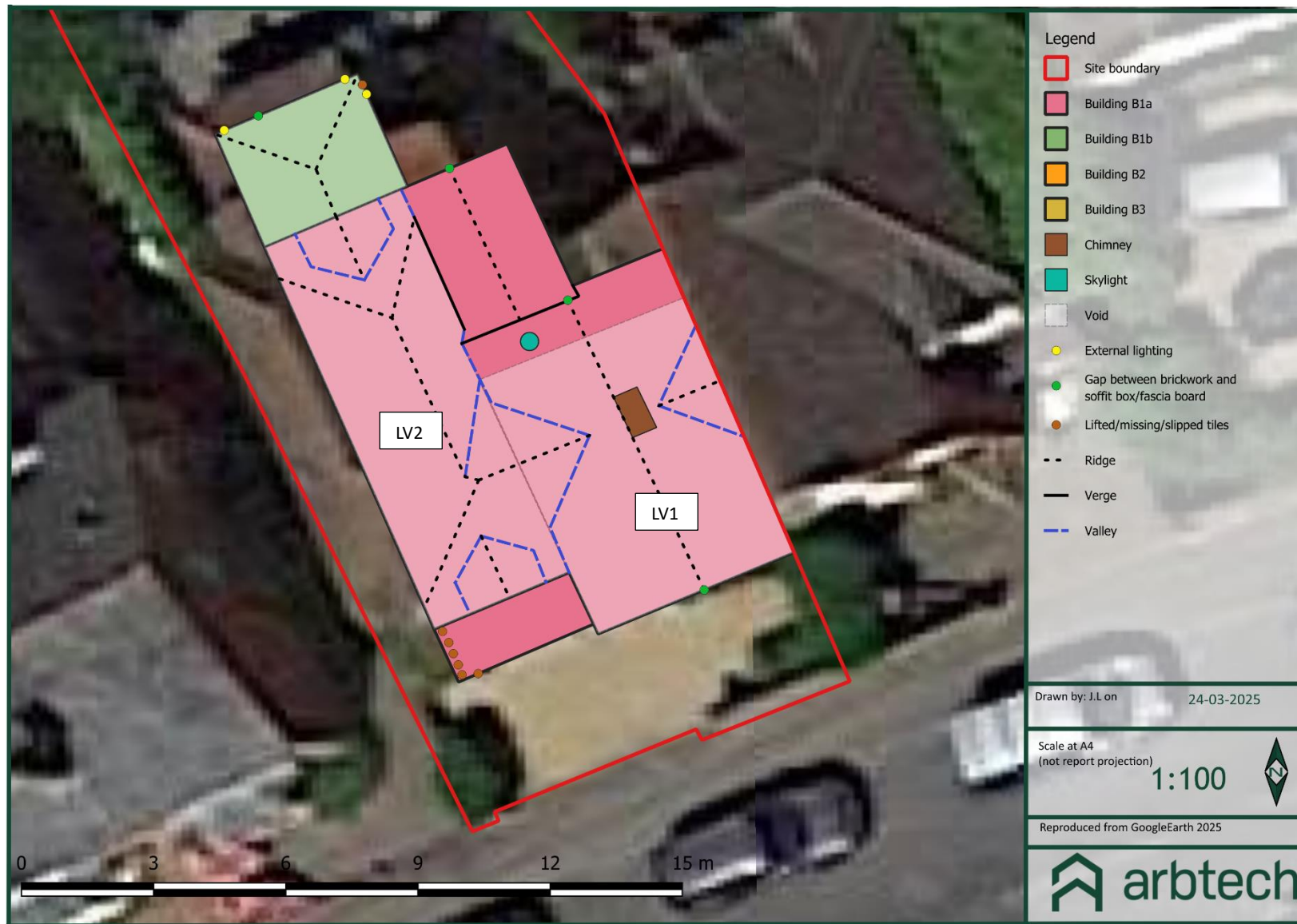
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. None foreseen.
<i>Recommendations</i>	No further surveys are required.
Badger	
<i>Summary of Survey Findings</i>	From the survey and aerial imagery, [REDACTED] [REDACTED] [REDACTED] [REDACTED] [REDACTED]
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. No impacts are anticipated [REDACTED] proposed development.
<i>Recommendations</i>	None.
Riparian animals	
<i>Summary of Survey Findings</i>	There are no watercourses on or connected to the site. The nearest watercourse is ~950m west of the site.
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. 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 site boundaries (hedgerow) provide suitable commuting and foraging opportunities for dormice. However, no suitable woodland habitats are connected to the site (separated by roads and residential dwellings). There are no dormouse European Protected Species License (EPSL) within 2km.

<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. 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 modified grassland, introduced shrubs, scattered trees, and hedgerows provide foraging and commuting opportunities for hedgehogs. Walls and fencing surround the site. No gaps were noted within or under the fencing and walls. This will reduce connectivity to the site, leading to fragmentation, and, thus, foraging and commuting opportunities for hedgehogs.
<i>Foreseen Impacts</i>	All habitats for the proposed development will be retained, and all works will be carried out on existing hardstanding. However, construction activities (such as machinery and materials moving around the site) could result in the death or injury of hedgehogs, if they are present.
<i>Recommendations</i>	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.

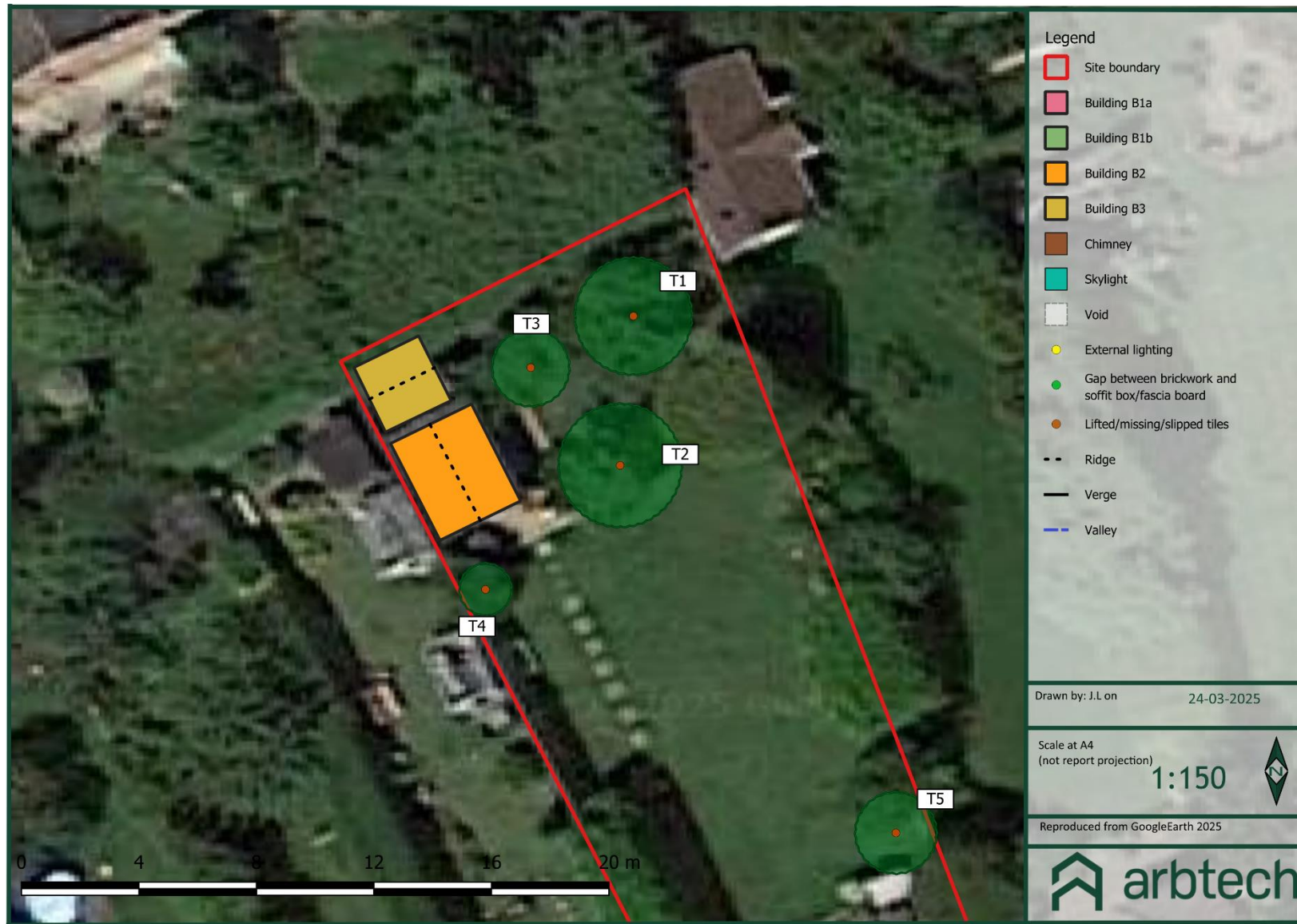
Appendix 1: Habitat map



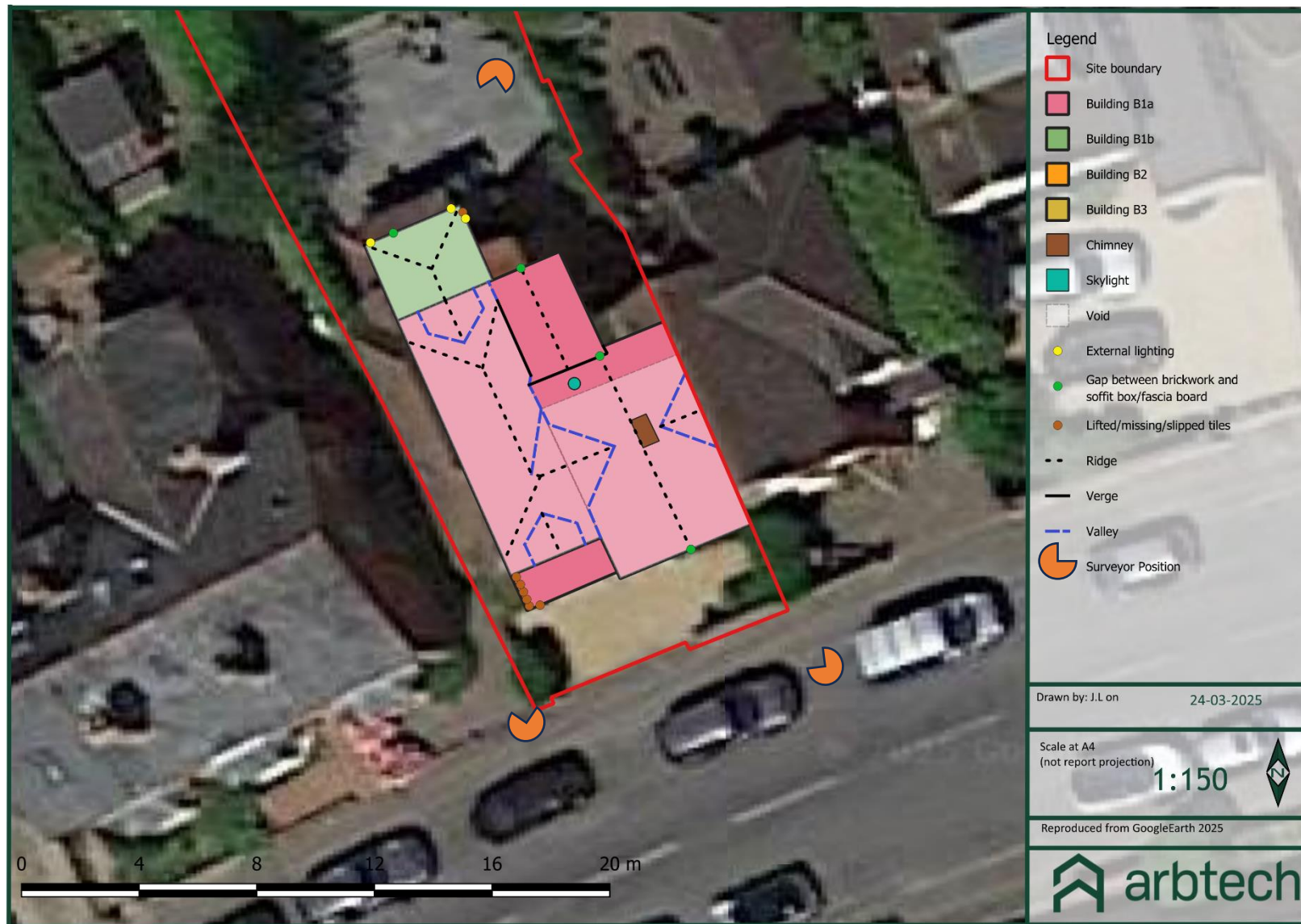
Appendix 2: PRA plan (1/2)



Appendix 3: PRA plan (2/2)



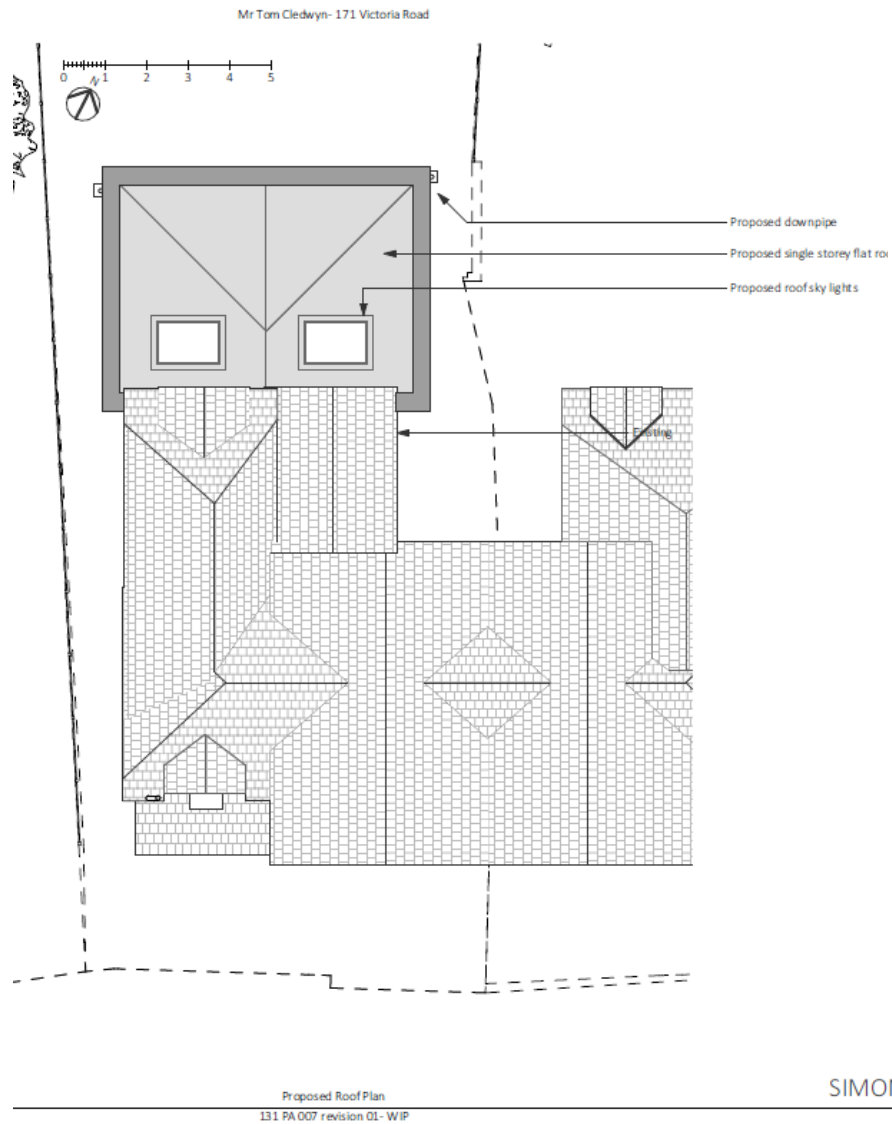
Appendix 4: BERS plan



Appendix 5: Location map



Appendix 6: Proposed plan



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Appendix 7: Photos



Photo 1: Looking north at the grassland, scattered trees, hedgerows, introduced shrubs and buildings.



Photo 2: Looking south at the grassland, introduced shrubs, hedgerows and buildings.

Photo 3: Hedgerow H1.



Photo 4: Hedgerow H2.



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Photo 5: Hedgerow H3.



Photo 6: Introduced shrubs.



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