



Preliminary Ecological Appraisal & Preliminary Roost Assessment

Survey site:

81 Christchurch Road, Reading, Berkshire, RG2 7BD

Client:

Milman and Kennet Surgeries

Survey date:

23/03/2026

Project:

This report is prepared to inform a planning application with Reading Borough Council. This proposal can be described as the change of a pitched roof to a flat roof on a single storey extension.

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

Contents

Introduction and Context.....	2
Introduction.....	2
Methodology	2
Limitations	2
Results, Impacts and Recommendations.....	3
Site Location and Landscape Context.....	3
Habitats and Flora	5
Fauna	7
Appendix 1: Proposed Development Plan.....	20
Appendix 2: Site Location Plan.....	21
Appendix 3: Habitat Survey Plan	22
Appendix 4: PRA Plan	23
Appendix 5: Site Photographs	24
Appendix 6: Baseline Condition Assessments.....	26
Limitations and Copyright.....	27
Version Control	27

Introduction and Context

Introduction

The aim of the PEA was to obtain data on existing ecological conditions, and to conduct a preliminary assessment of the likely significance of ecological impacts on the proposed development. The aim of the PRA was to determine the presence or evaluate the likelihood of the presence of roosting bats, and to gain an understanding of how bats could use the site for roosting, foraging or commuting.

No previous ecology reports have been produced for this site by Arbtech Consulting Ltd or, to the author's knowledge, by any other consultancy.

Methodology

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](#).

Limitations

Whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report is a preliminary assessment and does not provide a complete characterisation of the site. Nor does it represent a full botanical assessment. It assesses the likelihood of protected, notable and important habitats and species being present, based on a site and landscape level habitat value-based risk assessment. This is based upon the ecology, biology and known distribution of species as currently understood.

No proposed development plans were available at the time of writing this report. This report should be updated once the plans are available.

A biological records data search has not been undertaken. However, given the location of the site, the nature of the habitats present and the assessed suitability of the site for protected or notable species, it is not anticipated that the purchase of biological records data will add any significant weight or alter the conclusions and recommendations outlined in this report.

The survey was completed outside of the optimal survey period (April to October) for ground flora, and as such the accuracy of botanical assessment and condition assessment data may be limited in terms of species visible and ground conditions at the time of survey.

Results, Impacts and Recommendations

Site Location and Landscape Context

Table 1: Site location and landscape context

Site Location
The site is located at National Grid Reference SU 72658 72103 and has an area of approximately 0.034ha comprising one building, developed land; sealed surface and sparsely vegetated land. The site is located in a urban setting, immediately surrounded by residential dwellings within the town of Reading. Reading university is located to the east of the site which has large areas of open space, Whiteknights Lake and scattered trees. The site is enclosed by fencing on the northern, eastern and western elevations, and a main road on the southern elevation. The wider landscape is comprised of urban development, with pockets of arable fields to the west and further north. There are lakes (Caversham Lakes) located 1.96km north. There are no watercourses on or adjacent to the site. The river Kennet is located 1260m west of the site. There are two ponds within 500m of the site. Light sand-rich, and medium sandy-loam soils and subsoils. Mildly Acidic to Neutral (pH: 4.5 - 6.5).
Priority Habitats and Designated Sites
Summary of Survey Findings <u>Priority Habitats</u> There are 5 priority habitats located within 2 km of the site. These comprise deciduous woodland, coastal and floodplain grazing marsh, traditional orchard, ancient & semi-natural woodland and wood pasture and parkland. The closest priority habitat comprises deciduous woodland, located ~350 m SW of the site. The site is separated from the woodland by residential dwellings. However, these dwellings have tree and hedge lined boundaries, which could create linear features for commuting bats and birds to utilise. <u>Designated Sites</u>

There are no other statutory sites within 2 km of the site. There is 1 statutory site within 10 km of the site. This is listed below:

Table 1a: Statutory sites within 10km of the site.

Designation	Distance from site
Thames Basin Heaths SPA 10km	9125m S

The site does fall within the impact risk zone for SSSI however, the proposed development type is not listed as possible high risk with regard to this designation.

The presence of non-statutory designated sites within 2km of the site cannot be established without data from the local records centre. Whilst some habitats in the wider landscape may host designations, the immediate environs of the site do not host habitats likely to be of designable quality.

Impacts

No direct impacts to any designated sites will occur as a result of the proposed development, due to the small scale and low overall impact of the development from such sites (where known), alongside additional factors such as distance in combination with connectivity disrupting barriers.

Recommendations

No recommendations.

Habitats and Flora

The site survey was undertaken by Beth Ellison-Perrett BSc (Hons), MSc, MRSB, with five years of experience, and holder of Natural England survey licences for bats [2025-86142-CL17-BAT] and great crested newt [2025-83625-SCI-CL08].

Table 2: Survey weather conditions

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
23/03/2026	12.1	70	100	4.8	None

Table 3: Habitats and flora

Habitats and Flora: Conclusion, Impact or Recommendations <i>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.</i>
Onsite habitats
Summary of Survey Findings <u>Developed land: sealed surface (u1b)</u> To the south of the site and the west of B1 are areas of developed land; sealed surface. The hard standing is comprised of tarmac and is of negligible habitat value for protected species. In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, this habitat is not subject to a condition assessment and is automatically assigned a 'N/A' condition. <u>Sparsely vegetated land (u1f)</u>

To the north of the site, is an area of sparsely vegetated urban land. This area is comprised of approximately 70% bare ground and 30% ruderals comprised of green alkanet, hyacinth, hogweed, wild strawberry, small-flowered cranesbill, bramble and cleavers. Additionally, on the eastern boundary of this area is a large sycamore stump.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the sparsely vegetated land was assessed to have a moderate condition value.

Building (u1b5)

There is one building on site, which is used as a doctor's surgery. Full details for buildings on site are included within Table 4.

Impacts

No direct impacts to any habitats on site will occur as a result of the proposed development. The development will be retained to the footprint of the building.

Recommendations

No recommendations.

Invasive / Non-native species

Summary of Survey Findings

No non-native invasive or otherwise problematic plants were recorded on site or are considered likely to be on site, but, given seasonal limitations and the sites wider context, may be visible at other times of year.

Impacts

None

Recommendations

None.

Fauna

Table 4: Fauna

Fauna: Conclusion, Impact or Recommendations			
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.			
Roosting Bats			
Summary of Survey Findings			
A review of the MAGIC database for European Protected Species Licences (EPSL) for bats within a 2km radius of the site has been completed. 9 EPSL were identified, as detailed below:			
Table 4a: EPSL records within 2km of the site - bats			
EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
2014-3941-EPS-MIT	Common pipistrelle and soprano pipistrelle	180m north	Destruction of a resting place
EPSM2010-2126	Common pipistrelle	780m east	Destruction of a resting place
EPSM2010-2266	Common pipistrelle and brown long eared bats	915m east	Destruction of a resting place and breeding site
2016-22301-EPS-MIT	Common pipistrelle	965m north	Destruction of a resting place
EPSM2012-4478	Common pipistrelle and soprano pipistrelle	1340m east	Destruction of a resting place
2019-44194-EPS-MIT	Common pipistrelle and soprano pipistrelle	1430m north	Destruction of a resting place

EPSM2013-6155	Common pipistrelle	1790m north	Destruction of a resting place
2017-32379-EPS-MIT	Common pipistrelle	1830m north-west	Destruction of a resting place
2017-28045-EPS-MIT	Daubentons	2000m north	Unknown

Buildings

Building B1 Description

B1 is a two-storey, detached, brick-built building currently in use as a doctor's surgery. The main roof is of a hipped structure clad with clay tiles, which exhibit minor defects such as slipped or worn tiles. Internal voids were recorded within the building.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B1 is assessed to have low habitat value for roosting bats due to raised tiles on the main roof.



Southern and western elevations of B1



Northern elevation of B1



Eastern elevation of B1

Feature	Materials	Condition/Suitability	Photographs
Roof	Clay tiles	The main roof is clad with clay tiles, exhibiting minor defects including slipped or worn tiles. On the main roof, on the southern elevation, two raised tiles were noted which could potentially be utilised by roosting bats. Similarly, on the western elevation of the main roof, two raised tiles were observed.	 <i>Raised tiles on the southern elevation</i>  <i>Raised tiles on the western elevation</i>
Voids	brown paper and horsehair and bitumen	A loft space was recorded within the main roof void of B1. The roof structure comprises modern timber beams, including the ridge beam. The roof is lined with brown paper, horsehair, and bitumen felt, which is in relatively good condition. The floor of the loft space is lined with mineral wool insulation, with timber boards present in places. Cobwebs were observed around the ridge beam and extending from the	 <i>Loft space, within the main roof of B1</i>

			roof to the floor, potentially indicating a lack of internal flying activity from void-dwelling bats. No daylight enters the loft space, suggesting it is well-sealed.		
	Single storey extension	Clay tiles	The single storey extension to the south of the building will be affected by the proposed plans. The roof tiles are in good condition, with the exception of the bottom verge tile which had been vandalised the day before this survey, causing the tile to fall off. The first photo shows that this area was well-sealed in December 2025 and the second photo shows the damage to the roof on this site visit. Therefore, the gap in the tile was not present during the 2025 bat season and therefore not utilised by roosting bats.	<i>The first photo shows that this area was well-sealed in December 2025 and the second photo shows the damage to the roof on this site visit.</i> 	



Impacts

The proposed development will not affect any of the features that could be used by roosting bats which were noted on the buildings during the survey and therefore no impacts to bat roosts are anticipated. However, the proposed development could result in disturbance to any bats present in the building at the time of the works due to noise, vibration or lighting.

Recommendations

Due to the potential for disturbance impacts to bats during the proposed works, the following precautionary working methods will be required:

- There must be no use of scaffolding that touches or obstructs the eaves of the building.
- No external artificial lighting will be used.

- Any use of power tools and high levels of noise and vibration will be carried out at least 10m from the development building and the main house where possible.
- There will be no radios or music played on the scaffolding or around the roof structures to keep disturbance to a minimum. Best practice measures will be employed to reduce noise and vibration to an absolute minimum.
- In the unlikely event that a bat is found, work will stop and the ecologist will advise on how to proceed.

Foraging and Commuting Bats

Summary of Survey Findings

There are no habitats on site which could be used for foraging bats. There are no strongly connected linear features present that may provide cohesive commuting routes between the site and features in the urban landscape.

Impacts

The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats.

Recommendations

The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for foraging bats:

- Planting of locally characteristic tree, shrub and hedgerows to increase foraging opportunities.

Amphibians

Summary of Survey Findings

A review of the MAGIC database for EPSL for great crested newts (GCN) within a 2km radius of the site has been completed. 1 EPSL was identified, as detailed below:

Table 4b: EPSL records within 2km of the site - Great Crested Newts

EPSL reference	Distance from site	Impacts allowed by licence
EPSM2010-1708	1480m south	Destruction of a resting place

A check was also completed for great crested newt class survey license returns and historic pond surveys. 1 record was identified, as detailed below:

Table 4c: Great crested newt class survey license returns and historic pond surveys

Record Type	Distance to Site
Great crested newt pond surveys 2017-2019	1600m south

There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of two ponds within 500m; located 315m south (P1) and 460m south (P2) of the site and is situated on the far side of the A327 (Shinfield Road). This landscape feature is likely to represent a significant barrier to dispersal due to heavy traffic flow and high kerbs along the road, eliminating connectivity to the site for great crested newts.

The site provides limited suitable terrestrial habitat for amphibians given the lack of optimal habitat (i.e. scrub, rank grassland). The areas of hard standing and sparsely vegetated urban land offer sub-optimal habitat for terrestrial amphibians. However, given the urban nature of the surrounding landscape (i.e. dominated by roads and hard standing which are sub-optimal for amphibians) it is unlikely that amphibians will migrate on to site. Further, there is limited suitable terrestrial habitat across the wider landscape reducing the likelihood of amphibians being present on site and across the surrounding areas.

Impacts

No impacts are anticipated on great crested newt, as a result of the proposed development as this species is considered to be absent from the site.

Recommendations

None.

Reptiles

Summary of Survey Findings

There is no suitable habitat present on site for reptiles due to a lack of habitats such as scrub and rank grassland which would offer refuge for these species. Further, the site is surrounded by urban development (i.e. roads and buildings) which is considered sub-optimal for reptile migration and therefore reptiles are considered unlikely to migrate from any nearby suitable habitats to the development site. As such it is likely that reptiles are absent from the development site.

Impacts

No impacts are anticipated on reptiles as a result of the proposed development.

Recommendations

None.

Birds

Summary of Survey Findings

No evidence of nesting birds was identified on the site. There are no suitable habitats on site which provide habitat for nesting birds.

Impacts

No impacts are anticipated on nesting birds as a result of the proposed development.

Recommendations

None.

Badgers

Summary of Survey Findings

No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting trees/scrub. The site is also surrounded by urban development (i.e. roads and buildings), which is sub-optimal habitat therefore reducing the likelihood of badgers being present within the surrounding area of the site.

Impacts

No impacts are anticipated on badgers as a result of the proposed development.

Recommendations

None.

Riparian animals

Summary of Survey Findings

There are no riparian habitats on or adjacent to the site.

Impacts

Otters

No impacts are anticipated on riparian animals as a result of the proposed development.

Water Vole

No impacts are anticipated on riparian animals as a result of the proposed development.

Recommendations

Otters

None.

Water Vole

None.

Hazel dormouse

Summary of Survey Findings

There are no suitable habitats on site to support hazel dormice.

Impacts

No impacts are anticipated on hazel dormice as a result of the proposed development.

Recommendations

None.

Invertebrates
Summary of Survey Findings The site provides limited habitat value for a variety of commonplace species but is unlikely to support important species and assemblages. Impacts The proposed development will be limited to the building. No vegetated habitats will be removed. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the presence of more extensive habitat locally. Recommendations The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for invertebrates: - Planting of pollinator friendly grassland species - Installation of insect hotels
Other e.g. small mammals
Summary of Survey Findings The sparsely vegetated urban land on site offers limited suitable foraging, sheltering and commuting opportunities for small terrestrial mammals such as rabbits, hares and hedgehogs. The site is well connected to more extensive habitats such as residential gardens, which are likely to host established populations. Although the connectivity of the site is limited with the surrounding urban infrastructure, hedgehogs are common to urban areas and can commute through gardens and gaps in fencing. As such, the presence of foraging, sheltering and commuting small mammals on site cannot be discounted. Impacts

The proposed development will be limited to the building. No vegetated habitats will be removed. The loss of such habitats is likely to be inconsequential to local small mammal/hedgehog populations owing to their low value and the presence of more extensive habitat locally.

Recommendations

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.
- Any pipework exceeding 100mm will be capped overnight.
- 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 small mammals 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.

Milman and Kennet Surgeries

81 Christchurch Road

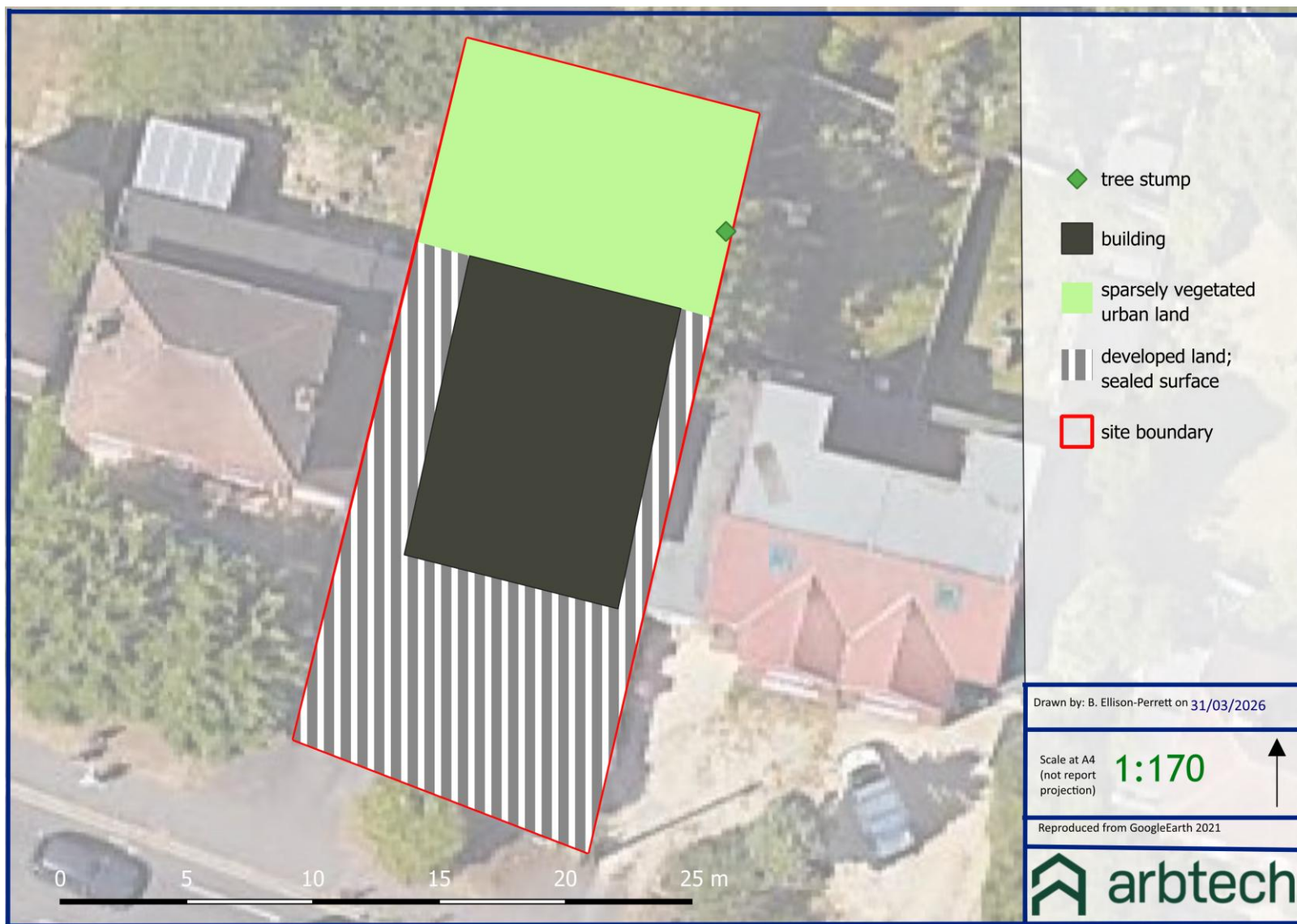
Appendix 1: Proposed Development Plan

Not available at the time of writing this report.

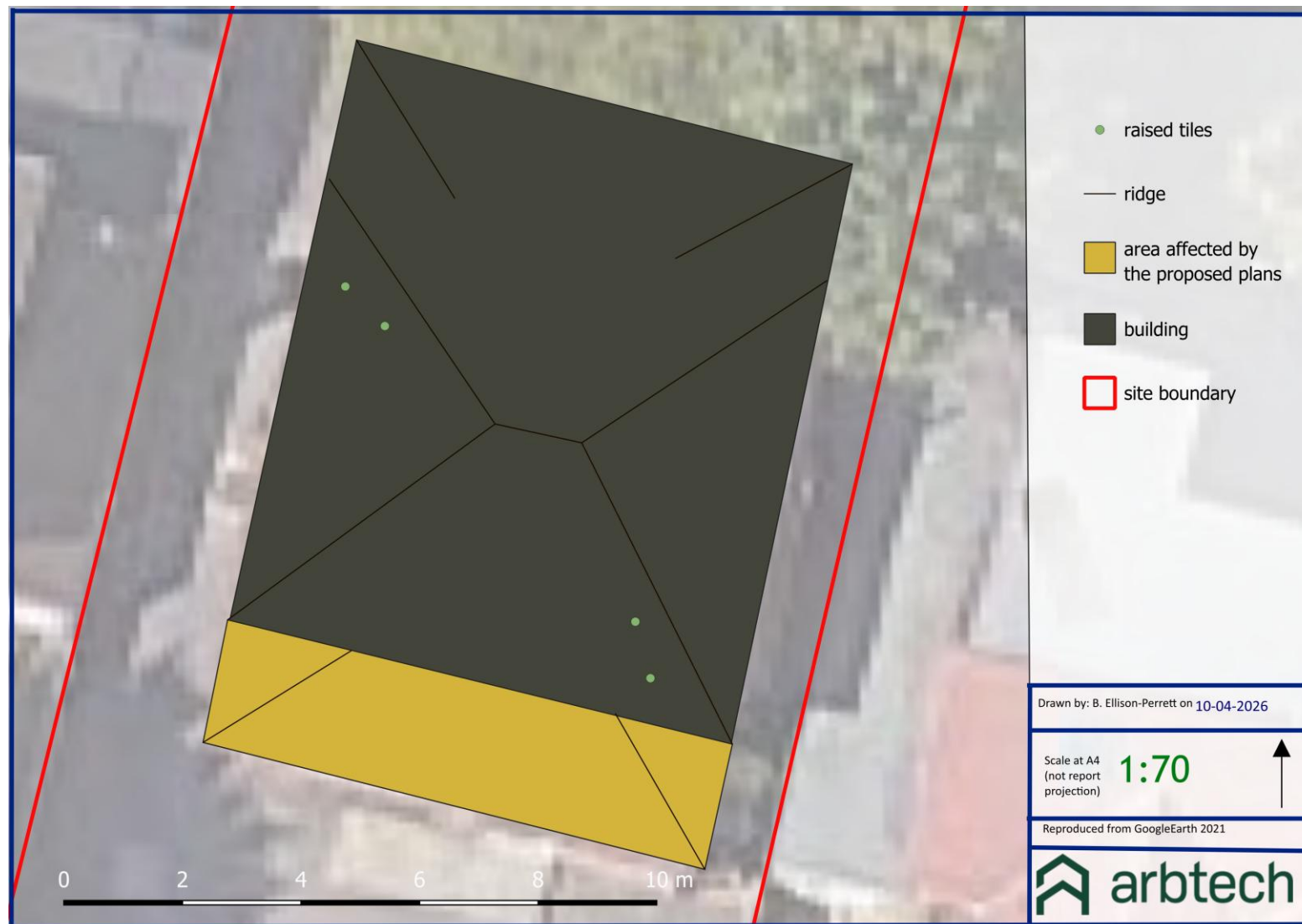
Appendix 2: Site Location Plan



Appendix 3: Habitat Survey Plan



Appendix 4: PRA Plan



Appendix 5: Site Photographs



Photo 1: Developed land; sealed surface



Photo 2: Sparsely vegetated land



Photo 3: The southern and western elevations of B1



Photo 4: The northern elevation of B1



Photo 5: The eastern elevation of B1

Appendix 6: Baseline Condition Assessments

Table 6a: Sparsely vegetated land condition assessment.

	Criteria Description	Criteria Passed?
A	Vegetation structure is varied, providing opportunities for vertebrates and invertebrates to live, eat and breed. A single structural habitat component or vegetation type does not account for more than 80% of the total habitat area.	N
B	The habitat parcel contains different plant species that are beneficial for wildlife, for example flowering species providing nectar sources for a range of invertebrates at different times of year.	Y
C	Invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement) cover less than 5% of the total vegetated area.	Y
BONUS	There is a complete absence of invasive non-native plant species (listed on Schedule 9 of WCA) and others which are to the detriment of native wildlife (using professional judgement). Note - this criterion is essential for achieving Good condition.	Y
		Total 2/3
	Condition Moderate due to passing 2 of 3 criteria and all essential criteria.	

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Version Control

Status	Issue	Name	Date
Draft	0.1	Beth Ellison-Perrett BSc (Hons), MSc, MRSB, Senior Ecologist	31/03/2026
Final	1.0		08/04/2026