



Preliminary Ecological Appraisal & Preliminary Roost Assessment

Survey site:

49 Cross Bank Road, Batley, West Yorkshire, WF17 8PN

Client:

Mr Asid Javeed

Survey date:

27/02/2026

Project:

This report is prepared to inform a planning application with Kirklees Council. This proposal can be described as the construction of a detached stable with extensions to the existing dwelling and the demolition of the existing garage & out-buildings.

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.

Executive Summary

The following is work you will need to commission to obtain planning permission and to comply with legislation. Further information, along with opportunities for biodiversity enhancement, are outlined in Tables 1, 3 & 4 of this report.

Feature	Survey Results Summary	Impact Assessment	Recommendations
Protected and Priority Species	The site offers limited opportunities for birds, widespread reptiles, amphibians, hedgehogs, and badgers. No evidence of protected species recorded. B1 and B6 were identified as having features present that are suitable for roosting bat species.	To ensure compliance with legislation and good practice, precautionary working methods should be adopted during construction for widespread reptiles, amphibians, hedgehogs, and badgers, including maintaining vegetation at a low sward, covering excavations or providing escape ramps, and implementing sensitive lighting to avoid spilling onto adjacent woodland. B6 is being demolished entirely as part of the proposed works, and B1 will have a full roof replacement to accommodate its conversion from a bungalow to a two-storey residential property. This could result in the destruction of any bat roosts present.	A low impact lighting strategy may be required for the adjacent woodland. One bat emergence/re-entry survey will be required on B1 and B6, requiring 4 surveyors for B1 and 2 surveyors for B6 to provide full coverage of the building's elevations. If bat roosts are confirmed in either building two additional surveys may be required to characterise the roost and to inform an EPSL application to Natural England.
Notable Habitats	The closest priority habitat comprises priority lowland mixed deciduous woodland, located immediately adjacent to the western boundary of the site.	No direct impacts to any designated sites will occur because of the proposed development. However, due to the proximity of the site to lowland mixed deciduous woodland and the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution during construction, or increased recreational pressure, could occur.	A Construction Environmental Management Plan (CEMP) may be requested by the LPA via condition.
Biodiversity Net Gain	The proposed development may require a Biodiversity Net Gain	The proposed development will result in the loss of areas of grassland within a vegetated garden. This is likely to	The proposed development is unlikely to trigger the requirement for a

	(BNG) assessment, unless the application is submitted under a householder application. The BNG assessment will calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain.	have a minimal impact on biodiversity due to the low ecological value of these habitats. However, this could lead to a net loss in biodiversity at the site.	Biodiversity Net Gain (BNG) assessment, if the application is submitted as a householder application.
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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 - 2026.](#)

PRA survey methodology and legislation can be found in the Arbtech Supplement: [PRA Methodology and Legislation - 2026.](#)

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. 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. Felled tree stumps were found on-site, as per the BNG user guidance these have been marked as being in good condition. The sizes have been taken from stump measurements.

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 SE 23504 24698 and has an area of approximately 0.68ha comprising eight buildings, eight scattered trees, vegetated garden, developed land; sealed surface, artificial unvegetated, unsealed surface and introduced shrub.
Priority Habitats and Designated Sites
Summary of Survey Findings <u>Priority Habitats</u> There are 4 priority habitats located within 2 km of the site, including deciduous woodland, which is immediately adjacent to the western boundary. These habitats comprise of lowland mixed deciduous woodland, traditional orchard, ancient & semi-natural woodland and ancient replanted woodland. The site is well connected to nearby habitats through lines of trees present along the eastern boundary, connecting to off-site areas of non-priority woodland. <u>Designated Sites</u> There are no other statutory sites within 2 km of the site. 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 designatable quality.

Impacts

No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to the immediately adjacent lowland mixed deciduous woodland, and the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution during construction, or increased recreational pressure, could occur.

Recommendations

Best practice measures to minimise the possibility of pollution, damage to adjacent habitats must be implemented during construction. A Construction Environmental Management Plan (CEMP) may be requested by the LPA via condition. This should include the following measures:

- Retained trees adjacent to the site will 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).
- Appropriate buffering between the development zone and retained habitats (e.g. 15m for ancient woodland)
- Use of Heras or other appropriate fencing to prevent encroachment by contractors onto adjacent habitats.
- A Construction Ecological Management Plan (CEMP) will be required, outlining best practice measures to delineate the construction zone and to minimise the possibility of pollution and damage to nearby habitats during construction.

Habitats and Flora

The site survey was undertaken by Nicola Baxter BSc (Hons), MSc (Hons), Graduate Ecologist.

Table 2: Survey weather conditions

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
27/02/2026	10.2	84	40	38.6	Light rain

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>Built-up areas and gardens (u1) - Vegetated garden (828) - Bare ground (510)</u> The garden area is a large space occupying the majority of the site. It comprises areas of lawn, flower beds, and ornamental shrubbery. At the time of the site visit there were areas of bare ground caused by the tracks of heavy machinery and ground clearance. Large mounds of moved earth were present, with woodpiles and tree stumps observed. Tree stumps were identified along the southern boundary, four lawson cypress in keeping with off-site trees. These were medium size and no mature features were identified in the stumps or log pile sections. One small stump consistent with an immature sycamore was identified along the western boundary, along with two addition stumps consistent with medium size willow trees. The remaining grassland had a low sward and a low diversity of species present. Species present within this habitat include perennial rye-grass (<i>Lolium perenne</i>), Yorkshire-fog (<i>Holcus lanatus</i>), common nettle (<i>Urtica dioica</i>), dandelion (<i>Taraxacum</i>), daisy (<i>Bellis perennis</i>), common field-speedwell (<i>Veronica persica</i>), pineappleweed (<i>Matricaria discoidea</i>), common sorrel (<i>Rumex acetosa</i>), cleavers (<i>Galium aparine</i>), hairy bitter-cress (<i>Cardamine hirsuta</i>) and daffodil (<i>Narcissus pseudonarcissus</i> subsp. <i>pseudonarcissus</i>).

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.

Developed land: sealed surface (u1b)

Paving and sections of concrete were present surrounding the main building on-site and leading through the garden sections, including a tarmac access road and a disused swimming pool.

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.

Artificial unvegetated, unsealed surface (u1c)

There are gravel paths around the main building and the outbuildings.

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.

Built-up areas and gardens (u1) - Introduced shrub (847)

Overgrown rose bushes and other ornamental shrubbery, bramble is present.

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.

Scattered Trees (32), Felled (206)

Five trees are present on site, comprising 2 small and 2 medium size trees. Five stumps were also present at the time of the site visit indicating that on-site trees had been felled. The survey identified crab apple (*Malus sylvestris*) and goat willow (*Salix caprea*), both native species, alongside sycamore (*Acer pseudoplatanus*) which is a naturalised species and Lawson cypress (*Chamaecyparis lawsoniana*), which is non-native. The crab apple and one goat willow were assessed as moderate condition, while another goat willow and one sycamore were rated as poor as they had been felled. Two sycamore trees, both in good condition, were noted in the northern section of the garden; one had dense ivy cover across its stem, potentially supporting sacroxylic invertebrates, and the other, adjacent to it, also featured dense ivy on its stem. Three Lawson cypress stumps, located towards the southern boundary, were assessed as moderate condition, with loose bark noted on each stump, offering potential niches for invertebrates. All trees on site are young or semi-mature.

In accordance with the Statutory Biodiversity Metric Condition Assessment Matrix, the individual trees were assessed to have the following condition values:

Table 3a: The individual condition scores of each tree on site.

No.	Tree	Condition Score	Size Category	Felled?
#1	Crab Apple (<i>Malus sylvestris</i>)	Moderate	Small	N
#2	Goat Willow (<i>Salix caprea</i>)	Moderate	Small	N
#3	Sycamore (<i>Acer pseudoplatanus</i>)	Good	Medium	N
#4	Sycamore (<i>Acer pseudoplatanus</i>)	Good	Medium	N
#5	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)	Moderate	Medium	N
#6	Sycamore (<i>Acer pseudoplatanus</i>)	Good (as per BNG guidance)	Small	Y
#7	Goat Willow (<i>Salix caprea</i>)		Medium	Y
#8-10	Lawson Cypress (<i>Chamaecyparis lawsoniana</i>)		Medium	Y

Building (u1b5)

There are seven buildings on site; one is a dwelling, two of them are out-buildings, one is a greenhouse, one is a polytunnel, one is a woodshed and one is a storage shed. Full details for buildings on site are included within Table 4.

Impacts

The proposed development will result in the loss of vegetated garden. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats. However, the removed trees would contribute to a net loss in biodiversity at the site.

Recommendations

The proposed development may require a Biodiversity Net Gain assessment, to calculate the value of habitats on site and ensure the delivery of a minimum of 10% measurable biodiversity net gain.

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. Remain vigilant.

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

Table 4a: EPSL records within 2km of the site - bats

EPSL reference	Bat species affected	Distance from site	Impacts allowed by licence
EPSM2011-3454	Common pipistrelle	~1.7km	Destruction of a resting place

B1 and B6 were identified as having features present at the time of the site visit that would provide roosting opportunities for crevice dwelling bat species. Recommendations are included regarding further surveys.

Buildings

Building B1 Description

B1 is a single-storey, detached, brick-built dwelling. The building features a hipped roof clad with clay tiles. Minor defects were noted to the roof covering, including slipped or worn tiles. Internal voids were recorded within the building. No bat evidence was found during the survey.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B1 is assessed to have **low habitat value** for roosting bats due to low numbers of suitable features are present for individual crevice dwelling bat species.



B1 - residential property, northeastern elevation

Feature	Materials	Condition/Suitability	Photographs
Roof	Clay tiles	The hipped roof is clad with clay tiles. Minor defects were noted, including missing tiles and missing mortar. Potential roosting features were identified, comprising missing tiles on the southwestern and northeastern elevations, and missing mortar under the ridge tiles on the southwestern elevation, as well as missing mortar under the terminal ridge tile along the northeastern elevation. These features are suitable for crevice dwelling bat species. No suitable access points for void dwelling bat species were identified.	 <i>Missing tiles present on B1.</i>

				 <i>Missing mortar</i>  <i>Missing tiles.</i>	
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Voids	Bitumen felt	An accessible attic void was recorded within B1. The void has a bitumen felt lining and measures approximately 6m in length, 5m in width, and 3m in height, with an estimated area of 30m². The internal temperature was recorded at 18°C with a relative humidity of 68.3%. No specific roosting features or bat evidence were identified within this void.	 <i>Mineral wool insulation</i>  <i>Timber beams and intact lining</i>	
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			 <i>Visible boarding</i>	
Building B2 Description				
B2 is a single-storey, detached, brick-built out-building. The main roof is flat and constructed of bitumen felt. No internal voids were recorded. No bat evidence was found anywhere within the building. In line with Good Practice Guidelines (Collins, J (Ed) 2023), B2 is assessed to have negligible habitat value for roosting bats due to the garage has no suitable roosting features for crevice dwelling bat species and no suitable access or roosting features for void dwelling bat species.				

Building B3 Description

B3 is a single-storey, detached, timber-framed out-building. The main roof is gabled and clad with metal sheeting. No internal voids were recorded. No bat evidence was found anywhere within the building.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B3 is assessed to have **negligible** habitat value for roosting bats due to the metal sheeting for the roof of the workshop had insulation under each ridge negating the suitability of any access points or roosting features for bats.



Building B4 Description

B4 is a single-storey, detached, glass greenhouse. The structure features a gabled glass roof. No internal voids were recorded. No bat evidence was found anywhere within the building.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B4 is assessed to have **negligible** habitat value for roosting bats due to no features suitable for roosting bats.



Building B5 Description

B5 is a plastic polytunnel structure used for horticultural purposes. The building features a curved roof constructed from plastic sheeting. No internal voids were recorded.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B5 is assessed to have **negligible** habitat value for roosting bats due to the polytunnel is in a state of disrepair and has no suitable access or roosting features for bats.

Continued picture of polytunnel, to show the disrepair.



Building B6 Description

B6 is a single-storey, detached storage shed used as a wood shed. The building has a lean-to roof constructed of tiles, which has open gaps and lifted tiles. No bat evidence was found within the building. No internal voids were recorded.

In line with Good Practice Guidelines (Collins, J (Ed) 2023), B6 is assessed to have **low habitat value** for roosting bats due to the opportunities for crevice dwelling bats to roost in the hanging tiles on the western elevation. The suitability of the building for void dwelling bats has been reduced due to the internal space being well lit through transparent panels and exposed to the elements due to the metal roofing being in a state of disrepair.

The hanging tiles do provide gaps underneath due to the natural slate irregularities, these gaps provide roosting opportunities for individual crevice dwelling bats.



B6 - eastern elevation



B6 - western elevation



B6 - internal space

Feature	Materials	Condition/Suitability	Photographs
Roof	Tiles	The roof structure is a lean-to, constructed of tiles. There are gaps noted under the hanging slate tiles on the western elevation. These provide potential roosting opportunities for crevice-dwelling bat species, despite the internal space being exposed to increased light ingress.	
Building B7 Description			
B7 is a single-storey, detached, timber-framed storage shed. The main roof is gabled with wooden boards. No internal voids were recorded and no bat evidence was found anywhere within the building. In line with Good Practice Guidelines (Collins, J (Ed) 2023), B7 is assessed to have negligible habitat value for roosting bats due to absence of any suitable roosting features.			

Whilst the internal space is of a suitable size for void dwelling bat species the amount of light, wind and rain exposure greatly reduces the suitability.

The roof is in a state of disrepair and there are no tiles, lining or insulation present that would provide suitable roosting features for crevice dwelling bat species.



Trees

T3 & T4 Description

T3 and T4 are medium sycamores located in the northern section of the garden. The dense coverage of ivy on the stems could provide roosting suitability to low numbers of crevice dwelling bats. Due to the trees ages and maturity the ivy is not anticipated to obscure any other suitable features.



T3 is the tree to the left, and T4 to the right.

Impacts

The roof for building 1 will be removed during its conversion from a bungalow to a two-storey home, and all the outbuildings, including building 6 will be demolished as part of the proposed works. This could result in destruction of any bat roosts present within the identified features within the roof structures of both B1 and B6 and could cause disturbance, death or injury to bats. T3 and T4 will be retained.

Recommendations

Buildings

One bat emergence/re-entry survey will be required on B1 and B6, requiring 4 surveyors for B1 and 2 surveyors for B6 to provide full coverage of the building's elevations. If bat roosts are confirmed in either building two additional surveys may be required to characterise

the roost and to inform an EPSL application to Natural England.

These surveys must take place during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the building.

These survey visits should be completed during the optimal survey period mid-May to August inclusive and the survey visits should be at least three weeks apart. Completing surveys in the sub-optimal season, early May and September, would require greater justification of timing e.g., weather conditions, known local bat activity.

All of the surveys can be at dusk if supported by night vision aids (NVA).

Every surveyor should be equipped with an infrared camera as part of the survey to determine specific roost locations.

Trees

The current plans show that T3 and T4 are to be retained. If for any reason the plans change and these trees are to be impacted the below recommendations are to be followed.

As per Tables 6.3 and 7.1 of the Bat Survey Guidelines (2023) trees with RF-I's only do not require further survey effort, however compensation for lost features should be installed prior to tree felling works, and works should be carried out under a precautionary working method statement (PWMS). The PWMS includes:

- Prior to any RF removal, suitable compensation should be provided onsite (i.e. bat boxes in appropriate locations)
- Felling to be done under supervision by an ecologist
- An inspection of any features to be carried out by the arborist under supervision of the ground-based ecologist on site
- Any identified RF-I feature(s) will be soft felled in conjunction with an experienced arborist. This will involve sections of the tree with the RF to be cut away and lowered to the ground and inspected by a licenced ecologist
- Any RFs felled will be left in-situ on the ground within a 10m exclusion zone for 24 hours
- 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

Lighting mitigation may be required based on the outcome of the night bat survey(s).

If any bat roosts are confirmed from this survey schedule, a bat licence would be required to demolish/impact the buildings as it would

involve the destruction/disturbance of roosts. This is applied for with the help of a class 2 licensed bat ecologist after planning permission is granted, but before commencement of works.

Foraging and Commuting Bats

Summary of Survey Findings

The off-site line of trees along the southern boundary of the site could be used by local bat populations for foraging and commuting. In addition, the site is well connected to more suitable habitats in the wider landscape such as the adjacent off-site priority woodland to the southwest of the site.

Impacts

The proposed development will result in the loss of vegetated garden. Given the presence of more extensive areas of foraging and commuting habitat in the locality, this is likely to be inconsequential for bats.

Recommendations

A low impact lighting strategy may be needed following the results of the bat emergence surveys.

Amphibians

Summary of Survey Findings

A review of MAGIC database found no granted EPSL for great crested newts within 2km of the site.

No ponds are located on, or adjacent to, the site. A review of aerial imagery shows there are no ponds within 500m of the site.

There are no ponds on-site or within 500m. Due to recent management there are woodpiles and earth mounds present on the site. These have not been in situ long enough to act as suitable hibernaculum for great crested newts but may provide sheltering opportunities for common amphibians.

Impacts

The loss of such habitats is likely to be inconsequential to local great crested newt populations owing to the lack of suitable habitat on site. However, site clearance could result in the death or injury of common amphibians, if present.

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to great crested newts, further surveys are considered to be disproportionate. A precautionary working method will be implemented for common amphibians during construction, including the following measures:

- Site clearance will be undertaken outside of the amphibian hibernation season (November to February) insofar as is possible.
- A staged approach will be adopted for vegetation clearance, whereby the vegetation will be maintained below 15cm and left overnight to allow any amphibians to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter amphibians from the working area.
- Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent amphibians from utilising these areas.
- Best practice pollution prevention measures will be implemented to minimise impacts to nearby aquatic habitats that amphibians 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 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.

Reptiles

Summary of Survey Findings

No EPSLs returned from the magic database for reptiles.

The woodpiles on site provides suitable shelter, hibernation and foraging opportunities for reptiles, albeit suboptimal due to the active management and short sward of the grassland. The wider landscape offers limited habitat for reptiles due to the urban development surrounding the north and eastern boundaries of the site, providing a lack of mosaic habitat favoured by reptiles, however the adjacent woodland will provide some value. As such, the presence of reptiles on site cannot be discounted.

Impacts

The proposed development will result in the loss of vegetated garden. The loss of such habitats is likely to be inconsequential to local reptile populations owing to their low value and the presence of more suitable habitat locally. However, site clearance could result in the death or injury of reptiles, if present.

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to reptiles, further surveys are considered to be disproportionate. A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:

- Site clearance will be undertaken outside of the reptile hibernation season (November to February) insofar as is possible.
- A staged approach will be adopted for vegetation clearance, whereby the vegetation will be maintained at under 15cm and left overnight to allow any reptiles to disperse. The vegetation can then be cleared to ground level and must be maintained at this level for the duration of construction to deter reptiles from the working area.
- Any rubble piles will be dismantled by hand and debris and brash will be stored on pallets or removed from the site to prevent reptiles from utilising these areas.
- 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.

Birds

Summary of Survey Findings

No evidence of nesting birds was identified on or within any of the on-site buildings or trees, however the trees on-site and open buildings (B5 and B7) provide suitable shelter and could be used by common nesting birds. The site is located near an area of priority woodland to the west, which is likely to host a wide assemblage of bird species, and may, on occasion use the site.

Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.

Impacts

Vegetated garden will be removed during construction. The loss of such habitat is likely to be inconsequential to local bird populations owing to its low value and the presence of more extensive habitat locally. However, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.

Recommendations

Any building removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the buildings 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, depending on species present, until the young have fledged.

Badgers

Summary of Survey Findings

The grassland within the vegetated garden on site offers foraging, commuting and sett excavation opportunities for badgers. The site is relatively open, limiting sett excavation opportunities. No badger setts were noted on site or within a 30m radius of the site, where accessible. No evidence of badgers was found on site, though the wider landscape includes woodland pockets which can support established populations. As such, the presence of foraging and commuting badgers on site cannot be discounted.

Impacts

No works will be undertaken within 30m of a known badger sett. The proposed development will result in the loss of grassland within a vegetated garden. The loss of such habitats is likely to be inconsequential to local badger populations owing to their low value and the presence of more extensive habitat locally. However, construction activities could result in the death or injury of badgers, if present.

Recommendations

Owing to the nature of the proposed development and the low potential for impacts to badgers, further badger surveys are considered to be disproportionate. 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 150mm 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 badgers could use.
- 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, works must cease and advice must be sought from a suitably qualified ecologist.

Riparian animals

Summary of Survey Findings

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

Impacts

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

Recommendations

None.

Hazel dormouse

Summary of Survey Findings

There are no suitable habitats on site to support hazel dormice. Further the site is outside of the natural and re introduced range of 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. In particular, the deadwood/log piles will provide value to saproxylic invertebrates.

Impacts

The proposed development will result in the loss of vegetated garden but all on-site trees are to be retained. The loss of vegetated garden 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
- Incorporation/retention of log piles/dead wood
- Incorporation of bee bricks into the fabric of the new building. These should be installed 0.5m above ground level on a south-facing elevation with no obscuring vegetation
- Creation of rock and brash piles

Other e.g. small mammals

Summary of Survey Findings

The grassland within the vegetated garden on site offers limited foraging, sheltering and commuting opportunities for small terrestrial mammals such as rabbits, and hedgehogs. The site is well connected to more extensive habitats such as residential gardens directly north, a school playing field with lines of trees to the south and priority woodland to the west, 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 result in the loss of areas of vegetated garden. 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. However, construction activities could result in the death or injury of hedgehogs, if present.

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.

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

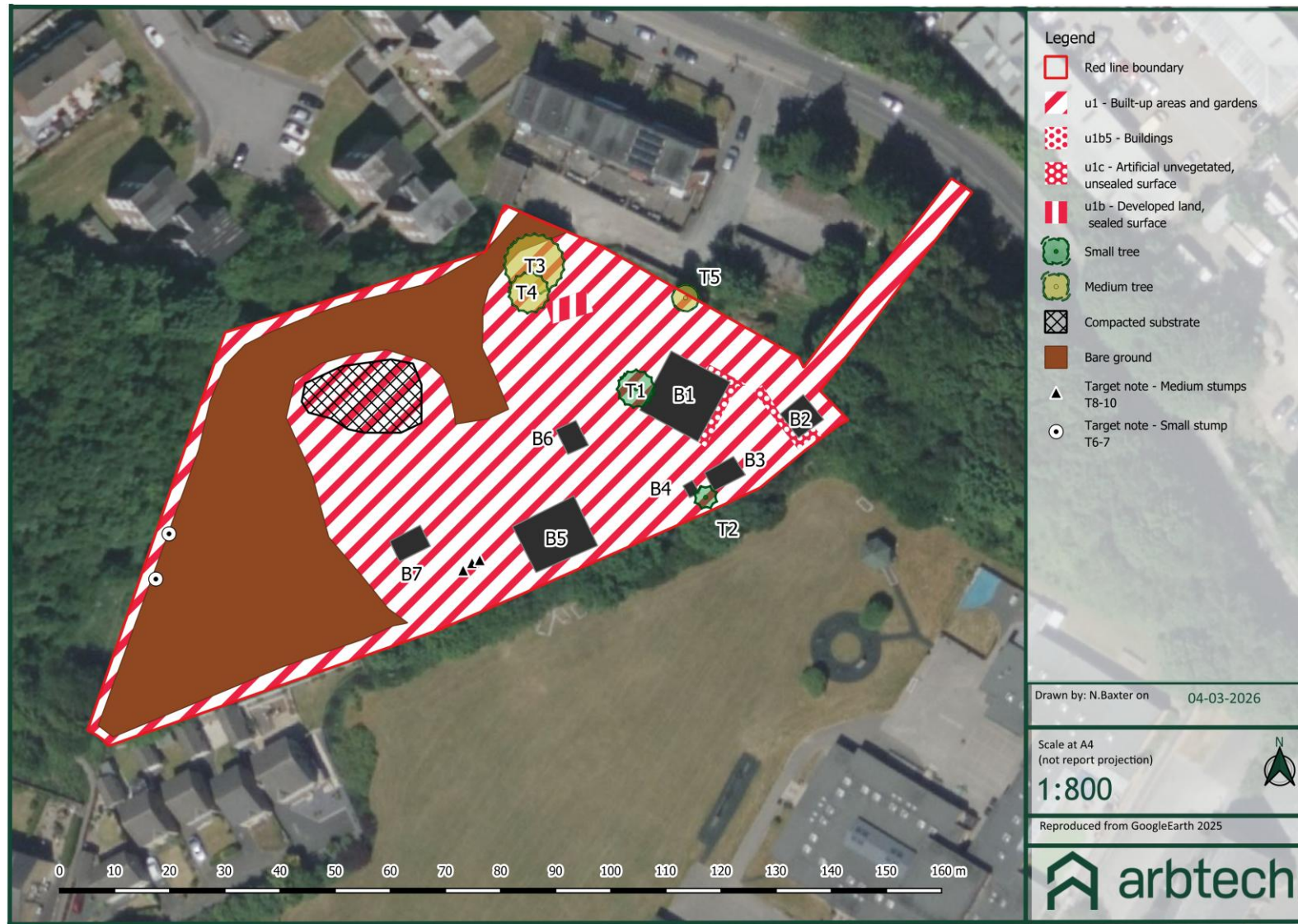
- Creation of fence gaps (14cm x 14cm) to enable small mammals to travel freely through the site
- Creation of brash piles
- Installation of hedgehog houses in shady areas.

[illegible]

Appendix 2: Site Location Plan



Appendix 3: Habitat Survey Plan



Appendix 4: PRA & BERS Plan



Appendix 5: Site Photographs



Photo 1: Vegetated garden



Photo 2: Tree stumps within the garden



Photo 3: Bare ground



Photo 4: Paving surrounding the greenhouses



Photo 5: Tarmac access road



Photo 6: Paving around the main building



Photo 7: Gravel path around the main residential building



Photo 8: Gravel around the garage



Photo 9: Ornamental shrubbery along the southeastern section of the garden



Photo 10: Additional ornamental shrubbery within the garden



Photo 11: Rose and bramble present along the northeast section of the garden



*Photo 12: Crab Apple (*Malus sylvestris*)*



Photo 13: Goat Willow (*Salix caprea*)



Photo 14: Sycamore (*Acer pseudoplatanus*)



Photo 15: Sycamore (*Acer pseudoplatanus*) - T4 is the right hand tree shown above



Photo 16: Three lawson cypress stumps (*Chamaecyparis lawsoniana*)



Photo 17: Two sycamore stumps (*Acer pseudoplatanus*)



Photo 18: A felled goat willow (*Salix caprea*)



Photo 19: Lawson Cypress (*Chamaecyparis lawsoniana*)



Photo 20:



Photo 21: B1 - residential property, northeastern elevation



Photo 22: B2 - Garage



Photo 23: B3 - workshop



Photo 24: B4 - Greenhouse



Photo 25: B5 - Polytunnel



Photo 26: B5 - Polytunnel



Photo 27: B6 - eastern elevation



Photo 28: B6 - western elevation



Photo 29: B6 - internal space



Photo 30: B7 - Eastern elevation



Photo 31: B7 - Internal space



Photo 32: B7 - Western elevation

Appendix 6: Baseline Condition Assessments

Table 8a: Scattered trees - #1 Crab Apple (*malus sylvestris*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

Table 8b: Scattered trees - #2 Goat Willow (*salix caprea*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N
		Total 3/6
	Condition Moderate due to passing 3 of 6 criteria and all essential criteria.	

Table 8c: Scattered trees - #3 Sycamore (*acer pseudoplatanus*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8d: Scattered trees - #4 Sycamore (*acer pseudoplatanus*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 5/6
	Condition Good due to passing 5 of 6 criteria and all essential criteria.	

Table 8e: Scattered trees - #5 Lawson Cypress (*chamaecyparis lawsoniana*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	N
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 3/6
	Condition Moderate due to passing 3 of 6 criteria and all essential criteria.	

Table 8f: Scattered trees - #6 Sycamore (*acer pseudoplatanus*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N
		Total 2/6
	Condition Poor due to passing 2 of 6 criteria and all essential criteria.	

Table 8g: Scattered trees - #7 Goat Willow (*salix caprea*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	Y
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	N
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	N
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	N
		Total 2/6
	Condition Poor due to passing 2 of 6 criteria and all essential criteria.	

Table 8h: Scattered trees - #8 Lawson Cypress (*chamaecyparis lawsoniana*) - condition assessment.

	Criteria Description	Criteria Passed?
A	The tree is a native species (or at least 70% within the block are native species).	N
B	The tree canopy is predominantly continuous, with gaps in canopy cover making up <10% of total area and no individual gap being >5 m wide (individual trees automatically pass this criterion).	Y
C	The tree is mature (or more than 50% within the block are mature).	N
D	There is little or no evidence of an adverse impact on tree health by human activities (such as vandalism, herbicide or detrimental agricultural activity). And there is no current regular pruning regime, so the trees retain >75% of expected canopy for their age range and height.	Y
E	Natural ecological niches for vertebrates and invertebrates are present, such as presence of deadwood, cavities, ivy or loose bark.	Y
F	More than 20% of the tree canopy area is oversailing vegetation beneath.	Y
		Total 4/6
	Condition Moderate due to passing 4 of 6 criteria and all essential criteria.	

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