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Preliminary Ecological Appraisal and Roost Assessment

Survey site:

49, Apple Tree Avenue, West Drayton, London, UB7 8BY

Client:

Ms Kay Chagger

Survey date:

2nd September 2025

Project:

This report is prepared to inform a planning application with the London Borough of Hillingdon. The proposal is described as:
Erection of a two-storey attached dwellinghouse following demolition of existing side extension with associated amenity space and parking.
[Unsubmitted]

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.**

Site Location and Context

The survey site is centred on National Grid Reference TQ06708129 and has an area of approximately 0.06ha.

The site comprises one dwelling (B1), two shipping containers on other developed land, areas of modified grassland with scattered trees, and associated gravel surfaces. It is situated within the town of West Drayton, Greater London. Aerial imagery shows the local landscape to be residential in character with several small copses, woodland swathes and public parks in close proximity to the site. Water bodies can be found nearby, such as Cowley Lake, located ~1.5km west. Such features likely enhance the area for a variety of species, including bats, amphibians and reptiles.

Survey Details

The site survey was undertaken by Phillip Wooding BSc (Hons) MSc, Graduate Ecologist, Accredited to Class 1 on Class 2 Natural England Bat Licence Number: 2024-12356-CL18-BAT.

Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
02/09/2025	17	73	100	6	Light

Executive Summary

- One bat emergence survey required on B1

Survey limitations

It should be noted that whilst every effort has been made to describe the baseline conditions within the survey area, and evaluate these features, this report does not provide a complete characterisation of the site. This assessment provides a preliminary view of the likelihood of protected species being present. This is based on suitability of the habitats on the site and in the wider landscape, the ecology and biology of species as currently understood, and the known distribution of species as recovered during the searches of historical biological records.

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.

There were no specific limitations to the survey.

Ecological Survey Factor **Conclusion, Impact or Recommendations**	**Detailed using desk study and site survey (carried out under good weather conditions). Any specific limitations noted within relevant section. This table may include further work you will need to commission (if any) to obtain planning permission or comply with legislation for other consent. All clients are expected to read and understand this section, or to contact the lead surveyor for advice.**
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, proposal plan in appendix 3 and photos in appendix 4). **Botanical species are described with reference to the DAFOR scale (D = Dominant; A = Abundant, F = Frequent, O = Occasional, R = Rare).**	
Summary of Survey Findings (*UKHab codes used)* - Buildings, u1b5 - Other developed land, u1b6 - Artificial unvegetated, unsealed surface, u1c - Modified grassland, g4	The site does not contain any habitats listed as a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). However, the site also contains XXX which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). Other habitats within the site are common and widespread and have low ecological value. Notable habitats are present within 1km/2km. **On-site habitat descriptions** **u1b5** – Buildings There is one building on site, an extension to the house adjacent to the south-eastern boundary of the site (B1). Further details of B1 can be found within the bat section below. **u1b6** – Other developed land Situated within the parcel of modified grassland to the north of the site are two shipping containers. **u1c** - Artificial unvegetated, unsealed surface In the middle of the site there is a large area of gravel surface, currently being used as a drive way and parking space for cars. **g4** – Modified grassland At the north corner of the site, and at the south corner of the site, are two areas of modified grassland, species present comprise; perennial ryegrass (D), Yorkshire fog (A), bramble (A), curled dock (F), creeping thistle (F), ribwort plantain (O), common nettle (O), ivy (O), bamboo (R), and ragwort (R). Within the habitat parcels there are less than 6 species present per square meter, the sward height is varied, scrub present accounts for over 20% of the habitat parcels, physical damage is evident in over 5% of the area, cover of bare ground is between 1 and 10%, and there is no bracken or invasive species present. Modified grassland achieves a condition assessment score of **poor**. Scattered trees 32 Scattered trees present on site are listed below;

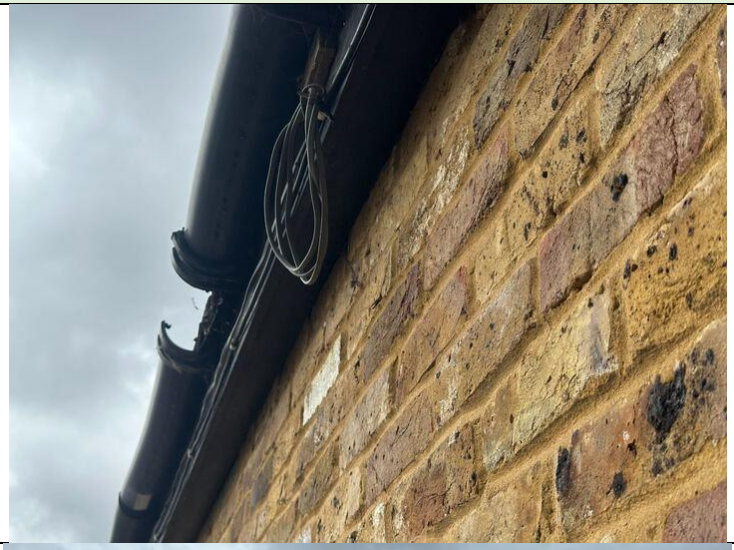
	1. Lawsons cypress – 34cm DBH 2. Lawsons cypress – 24cm DBH 3. Wild cherry – 36cm DBH 4. Lawsons cypress – 28cm DBH 5. Lawsons cypress – 24cm DBH 6. Field maple – 12cm DBH Condition assessment; • Less than 50% of the trees are native • Less than 50% of the trees are mature • Little to no evidence of adverse impact from human activities • Natural ecological niches present (lifted bark) • More than 20% of the canopy oversails vegetation beneath Scattered trees achieve a condition assessment score of **moderate**. **Local notable habitats** Notable habitats are present within 2km of the site with the closest being deciduous woodland located ~320m south-east of the site, with other habitats including; traditional orchard ~710m north east, woodland pasture and parkland ~1.8km west and open mosaic habitats ~1km north-west. Between the site and the closest notable habitat is the A437, lying to the east, as such the traditional orchard has suitable but limited connectivity to the site. Additionally, other notable habitats are separated from the site by main access roads and urban landscape, as such, the other notable habitats are not considered to have suitable connectivity to the site.
Foreseen Impacts	**On-site habitats** The proposed development will result in the loss of over 25m^2 of modified grassland habitat. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats. **Notable habitats** No impacts to any notable habitats are anticipated due to the small scale and distance of the proposed development from such habitats as well as the urban location of the site with surrounding physical barriers.
Recommendations	**On-site habitats** Retained trees should be protected in line with the measures outlined in the British Standard "Trees in Relation to Design, Demolition and Construction to Construction - Recommendations" (BS 5837) (2012). **Notable habitats** None.

	Biodiversity net gain The Environment Act (2021) requires all developments (excluding exemptions) to deliver a 10% net gain in biodiversity. Therefore, the planning application must be accompanied by a landscaping/habitat creation and enhancement strategy, biodiversity net gain calculations and a habitat management and monitoring plan to ensure the proposed development delivers a 10% net gain.
Locality and Designated Sites	
Summary of Survey Findings	**On-site designations** The site is not subject to any designation. **Statutory designated sites (within 2km)** There are no statutory designated sites within 2km of the site. The site lies within the impact risk zone for three SSSIs, detailed below: Fray's Farm Meadows SSSI Denham Lock Wood SSSI Wraysbury & Hythe End Gravel Pits SSSI **Non-statutory designated sites** The presence of non-statutory designated sites within 1kmof the site cannot be established without data from Greenspace Information for Greater London.
Foreseen Impacts	**On-site designations** No impacts foreseen. **Statutory and non-statutory designated sites** The site lies within the impact risk zone for Fray's Farm Meadows SSSI, Denham Lock Wood SSSI and Wraysbury & Hythe End Gravel Pits SSSI. However, the proposed development type is not listed as a possible high risk for these designations.
Recommendations	**On-site designations** None required. **Statutory and non-statutory designated sites** None required.

Invasive / Non-native species	
Summary of Survey Findings	No problematic invasive and non-native species recorded on site.
Foreseen Impacts	N/A
Recommendations	No further surveys but remain vigilant.
Invertebrates	
Summary of Survey Findings	The habitats present on-site, including modified grassland and scattered trees, likely provide common invertebrates with opportunities to forage and shelter. The site contains no further notable habitats which may provide niches for specialised or protected invertebrates.
Foreseen Impacts	Modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to their low value and the presence of more extensive habitat locally.
Recommendations	None
Bats	
Summary of Survey Findings	**EPSL data** A search of the magic.gov.uk database for granted EPSLs within a 2km radius of the site has been completed. Displaced bats from licensed sites <2km away from the survey site will find alternative habitat either within the mitigation measures implemented as part of the licence or will relocate to other known roosts sites in close proximity to the licensed site. No EPSLs are present within a 2km radius of the site. There are no Special Areas of Conservation designated for bats within 10km of the site. **Foraging and commuting habitat** Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of modified grassland and scattered trees. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. Most notably, the trees on site extend beyond it, adding to the continuity of vegetated linear features present in the wider landscape. Bats are well known to utilise linear features to aid navigation whilst travelling between foraging resources and roost sites.

	Roosting habitat Buildings and trees to be impacted by the proposed development are assessed for their suitability to support roosting bats below. There is one building on site, a small extension attached to the adjacent property (B1), and there are also two shipping containers present within the modified grassland habitat parcel on site. No evidence of roosting bats was identified on or within B1 or the shipping containers or any of the surveyed trees on-site.

B1 Building description	***Photographs***
Summary B1 is a small one-storey brick built building that is attached to the adjacent property. B1 has a flat roof, however, there is a sloped section clad in clay tiles which are all in good condition with no gaps present beneath them. There are thin wooden soffits around the entirety of B1, with only one gap present on the southern end of the western elevation. There is no internal void present in B1 and therefore it has no suitability for roosting bats within it. B1 has been assessed to have **low habitat value**.	

Feature	*Materials*	*Condition/description/suitability*	*Photograph(s)*
Walls	Brick	**Condition/description** Good condition, no cracks or gaps. **Suitability/access/evidence of bats** N/A	
Roof	Bitumen felt flat roof, with sloped sections clad in clay tiles	**Condition/description** Mostly good condition, few broken tiles with gaps under. **Suitability/access/evidence of bats** Gaps under tiles provide potential roosting habitat for crevice-dwelling species.	

			
Eaves	Wooden soffits	**Condition/description** Gap present in soffit on the southern part of the western elevation. **Suitability/access/evidence of bats** Provides possible bat access into crevices on wall tops or within the soffit box.	
Barge boards/fascia boards	N/A	N/A	N/A

Window/doors frames and lintels	Timber	Tight fitting	N/A
Internal voids	N/A	N/A	N/A

Shipping containers description	***Photographs***
Summary Present within the modified grassland habitat are two shipping containers, these containers have no crevices present around the exterior and therefore present no roosting habitat for crevice-dwelling species, there are also no access points into the containers and therefore also have no potential roosting habitat for void-dwelling species. The shipping containers have been assessed as having **negligible habitat value**.	

Foreseen Impacts	**Roosting habitat [Buildings]** The proposed development will result in the demolition of B1. This could result in the destruction of any bat roosts present and could cause disturbance, death or injury to bats. **Roosting habitat [Trees]** No roosting features were identified on any of the on-site trees and therefore impacts to roosting bats are deemed to be acceptable low. **Foraging and commuting habitat** The proposed development will not result in the removal of any habitats which could be used by foraging or commuting bats. However, the proposed development will include the use of lighting which could spill on to bat roosting, foraging or commuting habitat and deter bats from using these areas.

	Artificial lighting The proposed development may lead to an increase in the amount of current lighting of surrounding habitats or the retained building without mitigation. This may disturb commuting bats.
Recommendations	**Roosting habitat [Buildings]** **One** bat emergence survey is required on B1 during the active bat season (May – September) to confirm presence/likely-absence of bats roosting in or on the building. This survey visit should be completed during the optimal survey period mid-May to August as only one survey is required. Infra-red cameras should be used as an aid. **Two** surveyors are required to provide full coverage of the building. If bat roosts are confirmed in any of the buildings, then two additional surveys may be required to characterise the roost/s and to inform an EPSL application to Natural England. 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. **Roosting habitat [Trees]** 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. **Foraging and commuting habitat** No further surveys are required. **Artificial lighting** A low impact lighting strategy will be adopted for the site during post-development which outlines the areas of the site that will be retained as dark corridors. Parameters can be found on the Bat Conservation Trust website: https://www.bats.org.uk/our-work/buildings-planning-and-development/lighting-2 **Suggested biodiversity enhancements** Enhancements are dependent on the outcome of further surveys.
Birds	
Summary of Survey Findings	**Buildings** No evidence of nesting birds was identified on or within B1, however the building is considered suitable for nesting for species such as house sparrows.

	Trees and vegetation No bird nests were identified within the scattered trees on-site, however they all offer nesting opportunities and nest-building resources for birds. **Barn owls** The site does not appear to provide any suitable nesting sites for barn owls. **Overwintering birds** 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.
Foreseen Impacts	**Buildings/trees** The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. **Barn owls** None foreseen. **Overwintering birds** None foreseen.
Recommendations	**Buildings/trees** Any building or tree removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building and trees 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. **Barn owls** None required. **Overwintering birds** None required.

	Suggested biodiversity enhancements The installation of a minimum of two bird boxes on mature trees around the site boundaries will provide additional nesting habitat for birds e.g. Schwegler 1B Nest Boxes (trees) Schwegler 2H Robin Boxes (trees) Woodstone Nest Box (buildings or trees) Or a similar alternative brand. Tree boxes should be positioned approximately 3m above ground level where they will be sheltered from prevailing wind, rain and strong sunlight. Small-hole boxes are best placed approximately 1-3m above ground on an area of the tree trunk where foliage will not obscure the entrance hole.
Reptiles	
Summary of Survey Findings	**EPSL data** A review of the MAGIC database returned no granted EPSL records for protected reptiles within 2km of the site. **Habitat suitability** 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. **Wider landscape** The nearby areas of woodland are of elevated ecological value within the wider landscape and may represent important resources for local reptile populations. These habitats provide optimal foraging, commuting, and refuge opportunities for reptiles and are well connected to further suitable habitat in the wider landscape. The presence of reptiles utilising these adjacent habitats cannot be discounted.
Foreseen Impacts	No impacts are anticipated on reptiles as a result of the proposed development.
Recommendations	None required.
Amphibians	
Summary of Survey Findings	**EPSL and survey data** A review of the MAGIC database returned two granted EPSL records for great crested newts within 2km of the site, as detailed below.

<table>
<tr><td></td><td>
<table>
<tr><th>EPSL reference</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr>
<tr><td>2014-696-EPS-MIT
2014-696-EPS-MIT-1</td><td>~1.4km north east</td><td>Damage of a resting place; destruction of a resting place</td></tr>
<tr><td>EPSM2013-6002</td><td>~1.4km north east</td><td>Destruction of a resting place</td></tr>
</table>

Great crested newts exist in metapopulations and are known to utilise ponds and their connecting terrestrial habitat during their life cycle; great crested newts are typically found within terrestrial habitats up to 500m from breeding ponds (Langton et al. 2001). As such, the great crested newt metapopulation known to be present ~1.4km north east are not suitably connected to the site.

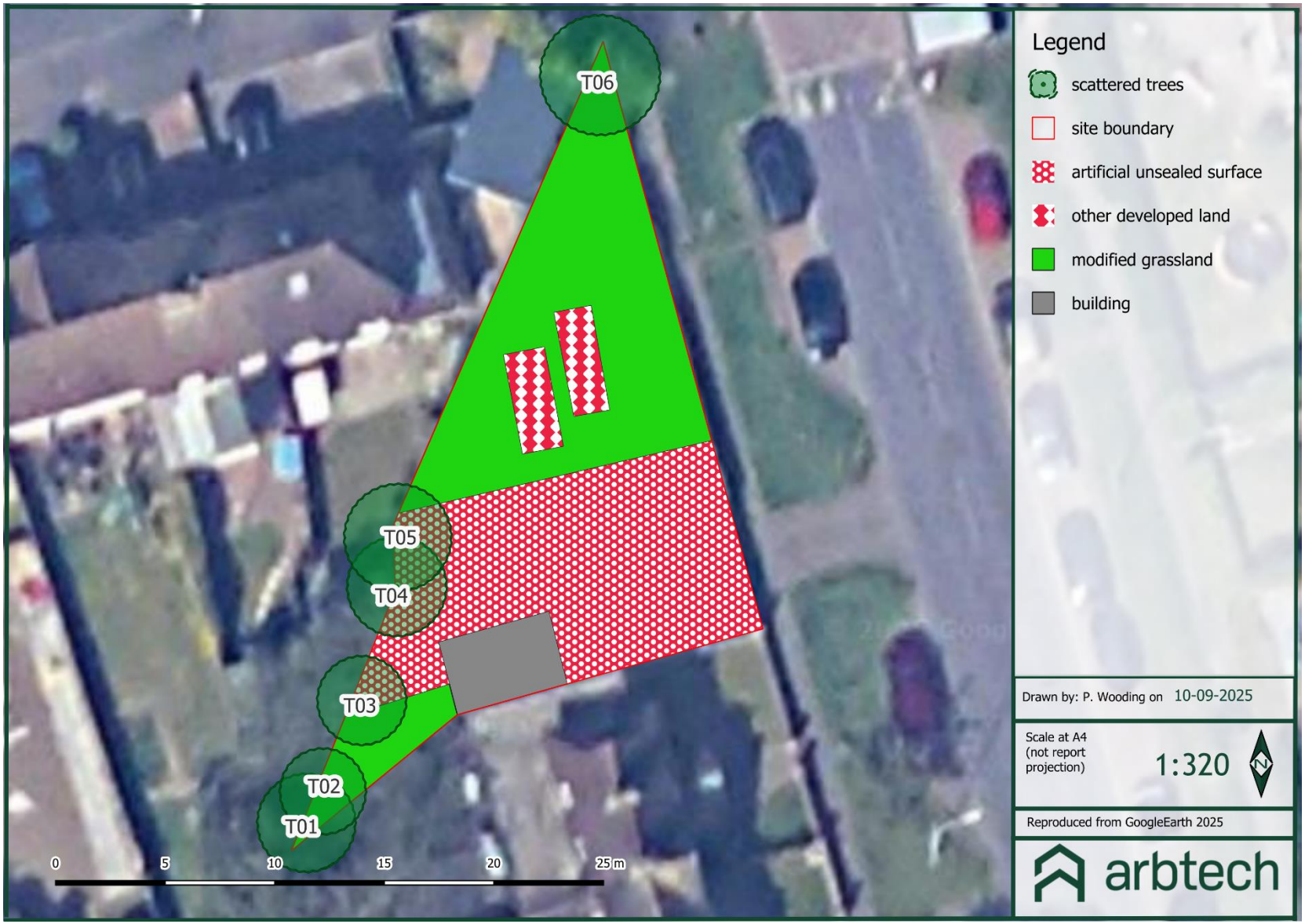
No ponds are present on site or within 500m of the site.

Terrestrial habitat suitability
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 modified grassland offer sub-optimal habitat for terrestrial amphibians. 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.</td></tr>
<tr><td>Foreseen Impacts</td><td>Given the lack of suitably connected breeding ponds within 500m of the site, the presence of GCN on-site is considered unlikely and therefore impacts to amphibians as a result of the proposed development are deemed to be acceptably low.</td></tr>
<tr><td>Recommendations</td><td>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:
• A staged approach will be adopted for vegetation clearance, whereby the vegetation will be strimmed to 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.</td></tr>
</table>

	• 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 advise must be sought from a suitably qualified ecologist.
Badger	
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 surrounding 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.
Foreseen Impacts	No impacts are anticipated on badgers as a result of the proposed development.
Recommendations	None required.
Riparian animals	
Summary of Survey Findings	A review of the MAGIC database returned no granted EPSL records for otters or water voles within 2km of the site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.
Recommendations	None required.
Hazel dormouse	
Summary of Survey Findings	**EPSL data** A review of the MAGIC database returned no granted EPSL records for hazel dormice within 2km of the site. **Habitat suitability** Dormice typically utilise a three-dimensional habitat structure as to commute between feeding and breeding sites whilst avoiding predation. As such habitats on site are considered unsuitable for hazel dormice and therefore the likelihood of this species being present on site is considered acceptably low.

Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of the proposed development.
Recommendations	None foreseen.
Other e.g. hedgehog	
Summary of Survey Findings	The modified grassland onsite provides limited foraging and commuting opportunities for hedgehogs.
Foreseen Impacts	Modified grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local 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. • 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. **Suggested biodiversity enhancements** The following habitat creation and enhancement opportunities could be incorporated into the proposed development which would be beneficial for hedgehogs: • Planting fruit bearing trees and species-rich grassland to increase foraging opportunities. • Creation of brash piles or installation of hedgehog houses in shady areas. • Installation of gaps under boundary fencing to enable hedgehogs to move freely through the site.

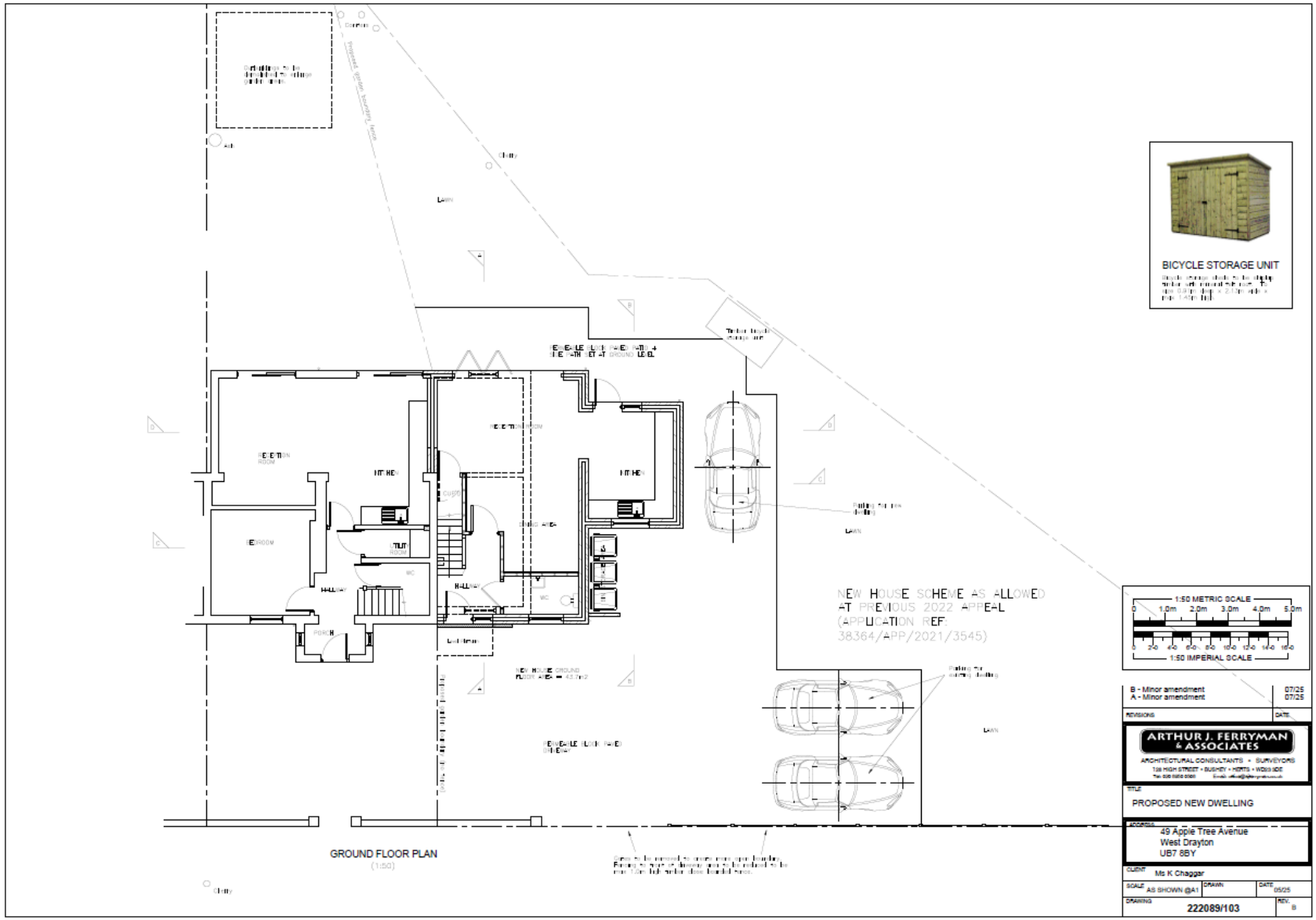
Appendix 1: Survey/Habitat map



Appendix 2: PRA map

Appendix 3: Location map

Appendix 4: Proposed plan



Appendix 4: Habitat Photos

Modified grassland	
Photograph	**Description**
	Figure 1: Modified grassland habitat parcel at the northern end of the site.
Scattered trees	
Photograph	**Description**
	Figure 2: Scattered trees present along the western site boundary.

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Version control			
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Draft	0.1	Phillip Wooding BSc (Hons) MSc, Graduate Ecologist	10/09/2025
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