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Preliminary Ecological Appraisal and Roost Assessment

Survey site:

The Cooperative, Well Street, Cefn Mawr, Wrexham LL14 3YE

Client:

Garob Oswald Road Ltd

Survey date:

31st October 2024

Project:

This report is prepared to inform a pending planning application with the Wrexham County Borough Council for erection of 5no. industrial units. The planning application is yet to be submitted

PEA survey methodology and legislation can be found in the Arbtech Supplement: **PEA Methodology and Legislation - 2024.**

PRA survey methodology and legislation can be found in the Arbtech Supplement: **PRA Methodology and Legislation - 2024.**

The site survey was undertaken by Katie Crawford BSc MRes ACIEEM (Natural England Protected Species Licence Numbers: [Bats] (2023-11335-CL18-BAT) [Great Crested Newts] (2023-11555-CL08-GCN)					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
31/10/2024	12	90	20	6	None
Limitations	Full access to the interior of the building was not provided at the time of survey, along with the eastern boundary of the site due to a locked gate. The extent of this limitation is discussed further in the report, however, it is not considered a large limitation to assessing vegetation as it was visible through the fence and is being retained as part of proposals.				

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)*	**Site Context** The survey site is centred on National Grid Reference T SJ 28252 42441 and has an area of approximately 0.44ha. The Site comprises a single building, currently in a state of disuse but previously used as a shop, along with associated parking. Directly east of the site lies a railway and extensive woodland beyond. The wider landscape comprises a suburban area with a mixture of urban development and greenspace. **On-site habitat descriptions** **u1b5** – Buildings The site contains a large building currently in a state of disuse. This building is of negligible ecological importance in its own right, its value with regards to protected species is discussed later in the report.

	u1b6 – Other developed land (10 scattered scrub, 81 ruderal/ephemeral, 33 line of trees) The majority of the site comprises hardstanding, with the periphery and areas surrounding the building containing ruderal/scrubby vegetation. This contains species such as buddleia, bramble, ivy and old mans beard. The developed land is of negligible ecological value, the scrubby habitats are of low ecological value. The east of the site also contains a line of trees, including species such as pussy willow, silver birch and maple, although this could not be extensively surveyed due to lack of access at the time of survey. The understory primarily comprised ivy and bramble. This line of trees is considered to be of moderate ecological value. **u1e** – Built linear features The site was bordered by stone walls in good condition with no crevices. These are of negligible ecological value. **Local notable habitats** Patches of lowland mixed deciduous woodland (LMDW) are present is close proximity to the site. The closest is located ~0.15km to the east. The trees on-site likely have functional connectivity to these patches of woodland, given their proximity to the site and the presence of numerous trees throughout the landscape. The existence of further priority habitats in close proximity to the site is not possible without a data search.
Foreseen Impacts	**On-site habitats** The habitats on-site are widespread and not notable. The proposed development will result in the loss of a small amount of scrubby/ruderal habitat, and current proposals do not include removal of trees. This is likely to have a minimal impact on biodiversity due to the low ecological value of these habitats. **Notable habitats** No direct impacts to any notable habitats will occur as a result of the proposed development. However, due to the proximity of the site to LMDW (0.11km northwest and 0.14k southeast), indirect effects (e.g. pollution, dust, litter, surface run off, etc.) could occur during construction.
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 Best practice measures to minimise the possibility of pollution affecting the nearby woodland must be implemented during construction.
Locality and Designated Sites	
Summary of Survey Findings	**On-site designations, Statutory designated sites (within 2km)** The site is not subject to any designations. The River Dee SSSI/SAC is present approximately 750m south east at its closest point to the site. However, the proposals do not contain anything listed as a risk to the designated sites' Impact Risk Zone. **Non-statutory designated sites** The presence of non-statutory designated sites within 1km/2km of the site cannot be established without data from the local records centre.
Foreseen Impacts	**Statutory Sites** It is considered that the distance of the site from the River Dee SSSI/SAC along with the nature of the development does not constitute a risk to this designated site. **Non-statutory designated sites** Impacts cannot be assessed.
Recommendations	**Statutory sites** None required. **Non-statutory designated sites** A data search may be required to ascertain if any non-designated sites may be impacted by the proposals.
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 scrub and 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	A very small amount of vegetated habitat (scrubby/ruderal) 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	No further surveys.
Bats	
Summary of Survey Findings	**EPSL data** Data on nearby bat licences cannot be ascertained without a data search. **Foraging and commuting habitat** Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of trees on the periphery of the site, located adjacent to a railway track. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations. 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. No evidence of roosting bats was identified on or within B1 or any of the surveyed trees on-site. *Building B1* B1 is a single storey disused building composed of both stone tiles and concrete with a flat roof. The interior of B1 was inaccessible at the time of survey, however, an access point on the northern elevation of B1 was identified that could provide access to bats. Considering the exterior of the building, it is not likely that bats would utilise this building for roosting given its lack of additional access features and loft space, however, the presence of bats cannot be ruled out. No bats or evidence of bat occupation (e.g. droppings, oil staining, etc.) was identified in the exterior of B1.

	B1 Suitability Assessment Given the presence of suitable bat habitat around the site (i.e. trees and woodland along with a nearby railway), it is assessed that B1 provides has **low** habitat value for roosting bats. *Trees* No bat roosting features were identified on any of the trees within the line of trees onsite, as these are too young. These trees have **negligible** suitability for roosting bats (Collins, 2023).
Foreseen Impacts	**Roosting habitat [Buildings]** The proposed development will result in the redevelopment of this building. This could result in the destruction of any bat roosts present and could cause disturbance, death or injury to bats. **Roosting habitat [Trees]** No features were identified on any of these trees, the trees are also to be retained through current proposals. **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/re-entry 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. Sub-optimal: early May and September. Would require greater justification of timing e.g., weather conditions, known local bat activity.

	Three surveyors are required to provide full coverage of the building's elevations to look for emerging/re-entering bats. An infrared camera should also be employed as part of the survey to see where any specific roost locations are located. If any bat roosts are confirmed from this survey schedule, a bat licence would be required to demolish the buildings as it would involve the destruction 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. It is also considered that an internal inspection of B1 may rule out the potential presence of bats and may downgrade this building to negligible potential. **Roosting habitat [Trees]** None required. **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
Birds	
Summary of Survey Findings	**Buildings** No evidence of nesting birds was identified on or within B1. B1 is deemed to provide low habitat value for nesting birds due to a lack of suitable nesting sites or access points, birds could, however, nest on the flat roof. **Trees and vegetation** No bird nests were identified within the vegetation on-site, however the trees and scrub 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.

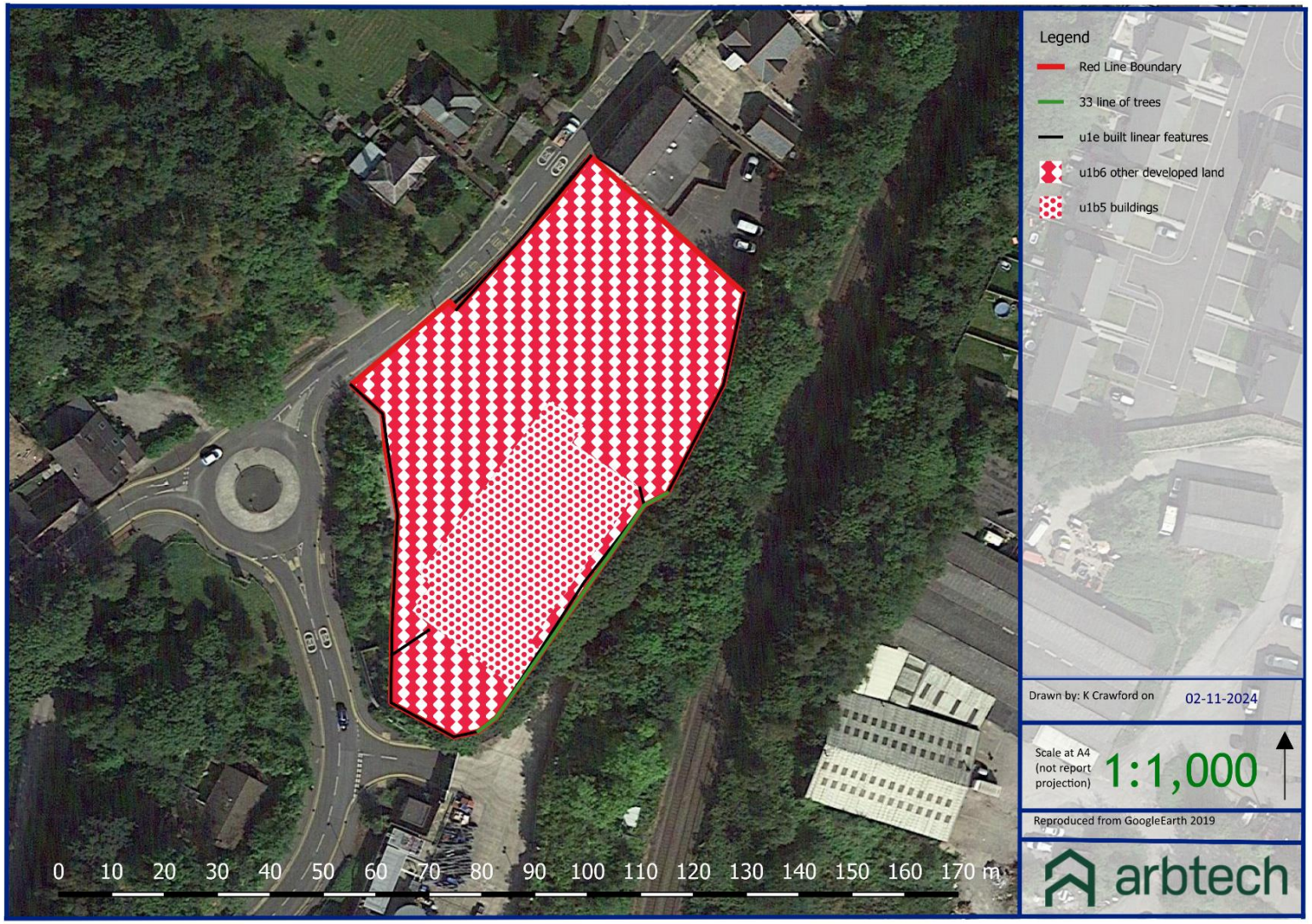
	Overwintering birds Due to the small size of the site and the extent and type of the habitats recorded, the site not considered suitable to support a significant assemblage of protected and/or notable birds.
Foreseen Impacts	**Buildings/trees** The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests. **Barn owls** None foreseen. **Overwintering birds** None foreseen.
Recommendations	**Buildings/trees** Any building or vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged. **Barn owls** None required. **Overwintering birds** None required.
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 Habitats recorded on site are assessed to provide suitable foraging, commuting, and refuge opportunities for reptiles in the form of scattered scrub and ruderal, however, this is a very small amount of habitat. Although potential connectivity to the site for reptiles is limited in extent, the presence of a small population of common reptiles cannot be fully discounted, albeit limited to peripheral vegetation.
Foreseen Impacts	Although a small area of suitable habitat is being removed as part of the development, there is a low risk that a low number of reptiles could be present in the vicinity of the works. These could be injured or killed without mitigation.
Recommendations	A precautionary working method will be implemented for widespread reptiles 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. • 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. • In the unlikely event that a reptile is identified, works must cease and advise must be sought from a suitably qualified ecologist.
Amphibians	
Summary of Survey Findings	**Habitat suitability** No ponds are present on site or within 500m of the site. 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 offer sub-optimal habitat for terrestrial amphibians. The treelines may offer refuge for these species, 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.
Foreseen Impacts	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.
Recommendations	None required.

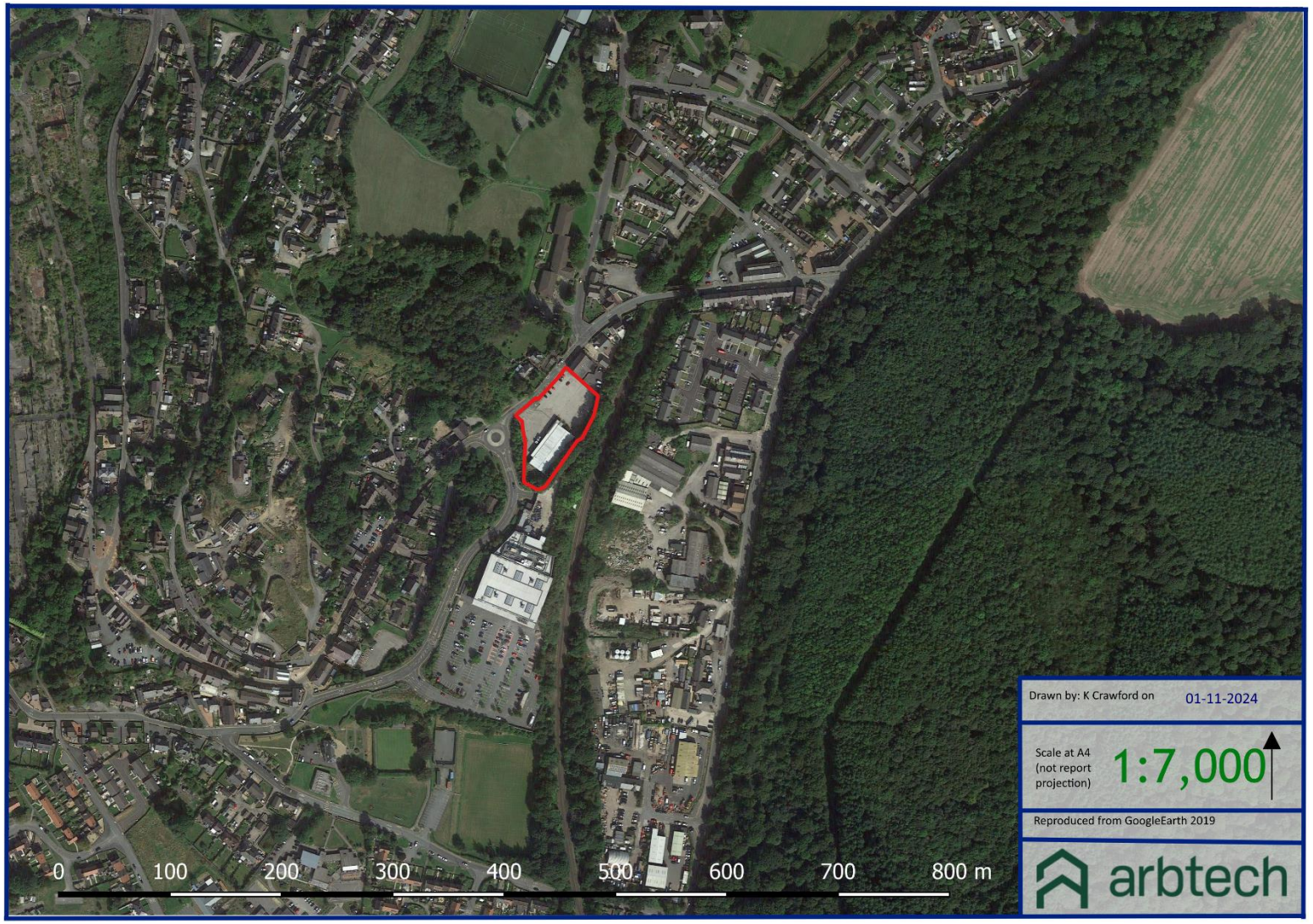
Badger	
Summary of Survey Findings	No badger setts were noted on site or within a 30m radius of the site. The site is considered unsuitable for badgers given the lack of suitable sett excavation areas/ground. Further, there is limited suitable badger foraging habitat on site given the lack of fruiting 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** The site lies outside of the know current range for hazel dormice and there are limited suitable habitats within the development area in the form of a line of trees. 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 ruderal herb and scrub onsite provides limited foraging and commuting opportunities for hedgehogs, with woodland habitat nearby.
Foreseen Impacts	A small amount of vegetated habitat 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.

Appendix 1: Survey/Habitat map



Appendix 2: Location map



Appendix 3: Proposed plan



Appendix 4: Photos



Photograph 1- Hardstanding and ruderal habitats within the site



Photograph 2- Further view of hardstanding and stone wall within the site



Photograph 3- Treeline to the east of the site (inaccessible at time of survey)



Photograph 4- Northern elevation of building within site, in a state of disuse



Photograph 5- Potential access point identified on northern elevation of building



Photograph 6- western elevation of building, well sealed no access points



Photograph 7- Further view of treeline



Photograph 8- Further view of hardstanding

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