

Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Hillcrest, Hillcrest Road, Rochdale, OL11 2QB

Client:

Derrick Cullen

Survey date:

3rd July 2024

Project:

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

Demolition of existing outbuildings, erection of two semi-detached dwellings and a single two storey detached dwelling. Provision of boundary screens and fences. Formation of new vehicle hardstanding.

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 Kayleigh Davies BSc, MSc, (Accredited on Natural England Bat Licence Number: 2022-10404-CL18-BAT.)					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
03/07/2024	10	81	40	10	None

Ecological Survey Factor	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.
Conclusion, Impact or Recommendations	
Habitats and plants (see habitat map in appendix 1, location plan in appendix 2, photos in appendix 3 and proposal plan 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	The rectangular survey site is centred on National Grid Reference SD 88860 10487 and has an area of approximately 0.16ha. The site is comprised of 2no. buildings, a large two-story dwelling area and a single-story garage area with a group of trees on the northwest boundary. The site is southeast of Castleton town centre with the M62 south of the site and pockets of deciduous woodland ~173m north, lowland fens ~536m west within Rochdale canal, along with fishing lakes ~390m south. The wider landscape comprises a sub-urban area including residential dwellings and associated roads and large arable fields to the south. Biological Record Data has not yet been acquired for the site. This will be incorporated into the report once obtained, however this is not expected to have an impact on the recommendations detailed in the report.

	<u>Developed, sealed surface [u1b6]</u> A small area of the site consists of developed land, comprising a concrete driveway. There is ~5% vegetation covering here dominated by dandelion and thistle. <u>Developed, sealed surface (buildings) [u1b5]</u> There are three permanent buildings on site, designated as B1-B3 and comprising a single-story garage, a two-story dwelling and a single storey building utilised as a gym. There are also two outbuildings that consist of a shed and a dog kennel. These buildings are discussed further in the bat roosting section of the report. <u>Sparsely vegetated urban land (u1f)</u> The southern section of the site and the southeastern corner consists of sparsely vegetated urban land of damaged concrete flooring with patches of bare ground and with approximately 40% cover of vegetation, with common ruderal herb present. Species include, nettle (d), herb Robert (a), cleavers (f), brambles (f), dock (f), creeping buttercup (o), common vetch (o) and sweet briar (r). <u>Other neutral grassland, line of trees and scattered trees (g3c, 33, 32)</u> The western section of the site consists of a largely unmanaged garden, with long grass with an average sword length of ~60cm. The grassland is in very good condition with only <5% of bare ground present. Species present include Yorkshire Fog (d), Perennial Rye (a), Orchard grass (f), Red Fescue (o) and timothy grass (r). Other plant species include, willow herb (d), dandelion (a), common comfrey (f), perennial cornflower (o), and oxeye daisy (r). <u>Mixed scrub (h3h)</u>
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	There is a small section of mixed scrub in the northeastern corner of the site. This scrub is moderately dense, with a canopy of a line of hawthorn dominated trees. The scrub is dominated by bramble with holly (f) and ivy (o). There is also a mixed scrub section of the other neutral grassland to the western boundary of the site. This section of scrub is dense and consists predominately of brambles with other species present such as common comfrey (a), holly (a), ivy (f), thistle (f), cleavers (o) and dock (r). >80% of the mixed scrub is native with no single species dominating more than 75% of the cover. Seedlings, saplings, young shrubs and mature shrubs are all present. No non-native invasive species were recorded, associated with the parcel (under Schedule 9 of the Wildlife and Countryside Act, 1981). The scrub is surrounded by tall grassland and lines of trees. There are no clearings present within the scrub. <u>Line of trees (33)</u> There is a line of trees present to the western and northern boundaries of the site. The trees lining the northwestern corner of the site consists of sycamore (d), ash (a), elm (f), cherry laurel (o) and apple (r). These trees are predominately mature with 15% coverage of scattered young self-set sycamore trees. The trees averaged from a tree trunk diameter of ~60cm to ~90cm and were all in good condition with no visible signs of decay or damage. The line of trees to the northeastern corner of the site were dominated by hawthorn (d), with cherry laurel (a), common privet (f), sycamore (o) and ash (r). <u>Local notable habitats</u>
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	Deciduous woodland is found within 2km of the site, with the nearest section being ~173m north of the site. Lowland fens are also found ~536m west of site. These notable habitats are relatively connected to the site with scattered pockets of woodland and hedgerows within urban gardens.
<i>Foreseen Impacts</i>	Sections of grassland and lines of trees, along with sections of urban land (carpark, vegetated urban land and developed land sealed) will be impacted during the works. There are no foreseen impacts from the proposed development on the surrounding notable habitats due to the urban surrounding area and the distance from the closest section of notable habitat
<i>Recommendations</i>	A biodiversity net gain (BNG) report is likely to be required for the proposal, but this is at discretion of the LPA. The southern section other neutral grassland can all be retained unaffected.
Locality and Designated Sites	
<i>Summary of Survey Findings</i>	Rochdale Canal, ~536m west, Site of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) as well as a Site of Special Scientific Interest Impact Risk Zone. SSSI: The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species floating water plantain <i>Luronium natans</i>. SAC: Rochdale Canal supports a significant population of floating water-plantain <i>Luronium natans</i> in a botanically diverse water plant community which also holds a wide range of pondweeds <i>Potamogeton</i> spp. Rochdale Canal is also within the Site of Special Scientific Interest regarding all planning applications, except householder applications. This risk zone includes risks from pipelines and underground cables, large non-residential developments or residential developments of 50 units or more along with any development that could cause air pollution or dust either in its construction or operation. Hopwood Woodland, Local Nature Reserve, ~1.96km southwest

	The reserve is made up of a number of smaller woodland areas around the grounds of Hopwood Hall. The woodland habitats vary and there are a number of toads and birds. SSSI: The Rochdale Canal contains important habitats for submerged aquatic plants and emergent vegetation, including extensive colonies of the nationally scarce SAC species floating water plantain <i>Luronium natans</i>. The site also supports a diverse assemblage of aquatic flora, notably its assemblage of pondweeds, <i>Potamogeton</i> spp; the nine species of which found in the canal represent a balanced community which reflects the quality of water. SAC: Rochdale Canal supports a significant population of floating water-plantain <i>Luronium natans</i> in a botanically diverse waterplant community which also holds a wide range of pondweeds <i>Potamogeton</i> spp. The canal has predominantly mesotrophic water. This population of <i>Luronium</i> is representative of the formerly more widespread canal populations of north-west England. Rochdale Canal is also within the Site of Special Scientific Interest regarding all planning applications, except householder applications. This risk zone includes risks from pipelines and underground cables, large non-residential developments or residential developments of 50 units or more along with any development that could cause air pollution or dust either in its construction or operation.
<i>Foreseen Impacts</i>	No foreseen impacts are foreseen from the proposed development due to the distance away from the designated sites.
<i>Recommendations</i>	None required.
Invasive / Non-native species	
<i>Summary of Survey Findings</i>	No problematic invasive and non-native species recorded on site.
<i>Foreseen Impacts</i>	N/A
<i>Recommendations</i>	No further surveys but remain vigilant.

Invertebrates	
<i>Summary of Survey Findings</i>	No habitat for protected or notable invertebrates is found on site.
<i>Foreseen Impacts</i>	None foreseen.
<i>Recommendations</i>	No further surveys.
Bats	
<i>Summary of Survey Findings</i>	There are two EPSLs listed on Magic Maps within 2km of site. EPSM2012-5119 located ~929m east and 2016-20262-EPS-MIT located ~1km east, both allowing the destruction of a resting place for common pipistrelles. <u>Foraging habitats</u> Habitats on site provide high value foraging and commuting opportunities for bats due to the lines of trees within the northwest boundary connecting to scattered trees that lead to deciduous woodland to the north of the site. This area is likely to provide micro-climatic conditions that support invertebrates that in turn will provide foraging opportunities for local bat populations. However, the wider landscape lacks connectivity due to urban dwelling areas and associated roads with scattered urban green pockets that will offer foraging opportunities. <u>Bats Roosting B1 (garage)</u> The onsite garage is a single storey, gable ended building, with brick constructed walls, slate tile roof, with an extension on the southern elevation with rendered walls and a slate tile roof. The garage is currently in use and regularly disturbed. There are wooden bargeboards on the western facing wall of B1 and visible lead flashing. The eastern elevation is in close proximity to the neighbouring garden and therefore view of this elevation is limited. Suitable bat roosting features:

	• Damage to the brick walls of the southern elevation of the brick walled section of B1. This creates crevices and gaps suitable to support roosting crevice dwelling bats. this damage also allows gaps below the end tiles and allows access beneath the tiles for crevice dwelling bats. • There are several lifted tiles on all roof structures of the building creating gaps suitable for crevice dwelling bats. • There is a gap that runs along the end tiles of the southern facing roof structure of b1 that allow access below the tiles that allow internal access for crevice dwelling bat species. • There is a gap between the brick walls and the lifted flashing on the southern and western adjoining section of the garage. This creates a suitable roosting feature for crevice dwelling bats. • The western gable is in good condition with no visible roosting features for bats. Similarly the southern gable end has no visible suitable bat roosting features. <u>Bats Roosting B1 (internal)</u> There is no loft space within B1 and the ceilings are vaulted and easily assessed from the ground. The ceiling consists of wooden boards and is well sealed, with no visible gaps or crevices. There are high levels of sunlight within the space that makes the interior sub-optimal for void dwelling bats. B1 has moderate habitat value for roosting bats. <u>Bats Roosting B2 (residential dwelling)</u> B2 is a cross gabled, two storey dwelling. the walls are rendered construction, the roof is constructed of slate and there are two brick chimney stacks.
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	Suitable bat roosting features identified: • There are several lifted tiles noted on all roof elevations on B1. These lifted tiles allow for suitable roosting features for crevice dwelling bats. • There are several sections of missing mortar below the ridge line on the western and eastern elevations of B2. These allow suitable crevices for roosting bats. • There are damaged sections of wooden bargeboard on the eastern and southern roof structure of B1. These damaged sections allow access below the tiles for roosting bats. the remainder of the wooden boards have gaps beneath the wood and the walls that also allow roosting features for small numbers of bats. • There is damaged section of mortar on the eastern elevation of the building that allow crevices suitable for roosting bats. <u>Bats Roosting B2 (internal)</u> There is one loft within B2, accessible via a loft hatch. The floor is unboarded with no safe access available, and therefore the loft was assessed from the hatch. The loft has bitumen felt lining present, with wooden timber beams and a large presence of mineral wool insulation. No bat evidence such as droppings or staining was observed. Suitable bat roosting features observed: • Sections of damaged lining allow internal access for bats. • There are areas of sunlight observed entering the loft near to the eaves of the eastern elevation. • The interior was assessed to be 18°C and 72% humidity. B2 has high value for roosting bats.
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	<u>Bats Roosting B3</u> B3 is a flat roof, single storey outbuilding. the roof is constructed of plastic sheeting and the walls are wooden boarded. There is a large glass window and glass doors on the northern elevation of B3, and therefore allows high levels of sunlight into the building. No exterior roosting features were observed with the roof in good condition. No ingress points were noted to allow internal access for bats within B3. B3 has negligible roosting value for bats. <u>Other outbuildings</u> Two other outbuildings on site, consisting of a wooden shed and a wooden dog kennel is present on site. These buildings were observed to have no suitable bat roosting features and are of an open nature which is not suitable for roosting bats. These buildings are therefore negligible for roosting bats. <u>Bats Roosting (Trees)</u> There are <30 trees on site, of mixed aged, predominately mature. Trees were observed to have suitable roosting features such as damaged branches and knot holes that appear to allow internal access into the trees for roosting bats. A full assessment of these trees was not undertaken.
<i>Foreseen Impacts</i>	The proposed development may lead to an increase in the amount of current lighting of surrounding habitats. This may disturb commuting bats.

	The proposed development involves the demolition of B1 and the removal of negligible outbuildings. The demolition of B1 will result in the destruction of bat roosts if present, and the death or injury to bats if present. The development will involve the removal of trees for the construction of the two new residential dwellings. This could result in the destruction of bat roosts if present and the death or injury to bats if present. B2 and B3 is not expected to be impacted by the proposed development.
<i>Recommendations</i>	B1: Two bat emergence/re-entry surveys are required on B1 during the active bat season to confirm presence/likely absence of bats roosting in or on the building. This survey visits should be completed during the optimal survey period mid-May to August inclusive. 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. Infrared cameras 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 further survey will be required to inform an EPSL license application to Natural England. The bat license would be required to demolish B1 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.

	B2 and B3: no impacts are proposed on the existing residential dwelling and associated outbuilding and therefore no more surveys are recommended. If this changes three bat emergence and re-entry surveys are required on B2 before works can begin. Trees: a ground level tree assessment (GLTA) is recommended on all trees proposed to be felled, before works can begin. This is to be able to assess these trees for features to support roosting bats before they can be removed. 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 Enhancements are dependent on the outcome of further surveys
Birds	
<i>Summary of Survey Findings</i>	No evidence of nesting birds was found on site during the surveys; however, birds could use the scattered trees and scrub for nesting. No habitat for schedule 1 birds was observed.
<i>Foreseen Impacts</i>	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.
<i>Recommendations</i>	Any vegetation removal should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the vegetation should be undertaken

	immediately, by a qualified ecologist, prior to the commencement of work. All active nests will need to be retained until the young have fledged. Precautions should be taken with machinery and noise levels when working close to any retained nests so as not to disturb any nearby nesting birds during construction works. At least a 3-5m buffer should be created between any machinery and active nests until the young have fledged.
Reptiles	
<i>Summary of Survey Findings</i>	No granted European Protected Species License (EPSL) pertaining reptiles was found within 2km of the site. The onsite habitat, such as the unmanaged grassland and the scrub boundaries provide sub-optimal reptile habitat. The unmanaged grassland of the on site garden allows suitable habitat for commuting reptiles. However, the site is surrounded by residential, built up area, and is very fragmented from further high value reptile habitat. Therefore, there is a suitably low risk on site for reptiles.
<i>Foreseen Impacts</i>	Although there is a suitably low risk for reptiles on site, 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.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread reptiles during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage reptiles. • Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape. • Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.

	• If any reptiles are found in the working area these should be allowed to disperse of their own accord or, if at immediate risk, should be moved by hand to a sheltered, vegetated area away from disturbance. • In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist. The site could be enhanced for reptiles post development with the inclusion of log piles and a compost heap.
Amphibians	
<i>Summary of Survey Findings</i>	There are no great crested newt EPSLs within 2km. Amphibians require suitable aquatic habitat in which to breed. A review of aerial imagery indicates that there are no ponds within 500m or on site. Areas of scrub and trees leading to the site could provide access for toad species. There is suitable terrestrial habitat within the interior of the survey site. The thin areas of bramble scrub in the northern and western boundaries provide suboptimal terrestrial amphibian habitat. The interior of the site has negligible habitat value for amphibians. Protected amphibians overall are likely to be absent from the interior of the survey site year-round.
<i>Foreseen Impacts</i>	None foreseen, however there is a risk of common amphibians commuting through the site if in the area.
<i>Recommendations</i>	A precautionary working method will be implemented for widespread amphibians during construction, including the following measures: • Vegetation will be maintained at a short sward (5cm) to discourage amphibians. • 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 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.
Badger	
<i>Summary of Survey Findings</i>	No evidence of badgers was found on site, such as setts, prints or latrines. The scrub and tree lined boundaries to the north and west of the site allow foraging habitat for badgers. Furthermore, there is access on to site for commuting badgers. Therefore, there is a risk of commuting badgers on site.
<i>Foreseen Impacts</i>	On site proposed works may cause harm to commuting badgers if not mitigated.
<i>Recommendations</i>	Basic precautionary mitigation during works is recommended: • 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 habitats which badgers could use. South and west boundaries. • 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 within 30m, works must cease and advice must be sought from a suitably qualified ecologist.

Riparian animals	
<i>Summary of Survey Findings</i>	There are no watercourses on or connected to the site. Off-site ditches are found to the east along the road and north beyond the tree line.
<i>Foreseen Impacts</i>	No impacts are anticipated on riparian animals as a result of the proposed development.
<i>Recommendations</i>	N/A
Hazel dormouse	
<i>Summary of Survey Findings</i>	This site is located outside the known geographical range for any existing or introduced populations of hazel dormice, and so they are likely to be absent from the site. Although connected to a deciduous woodland to the northeast, there is no suitable dormouse habitat on the site itself and the local habitats are heavily fragmented and not connected to core habitats for the species due to urban dwellings present. There are no dormouse European Protected Species License (EPSL) within 2km.
<i>Foreseen Impacts</i>	No impacts are anticipated on hazel dormice as a result of the proposed development.
<i>Recommendations</i>	None.
Other e.g. hedgehog	
<i>Summary of Survey Findings</i>	Hedgehogs are known to use gardens and areas of grassland, for foraging and commuting routes. They may utilise the group of trees present at the site for commuting, foraging and sheltering purposes. Hedgehogs are known to travel 1-2km each night therefore, a lack of various commuting routes may limit the suitability of the site.
<i>Foreseen Impacts</i>	Construction activities could result in the death or injury of hedgehogs, if present.
<i>Recommendations</i>	Similar to the badgers, 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.

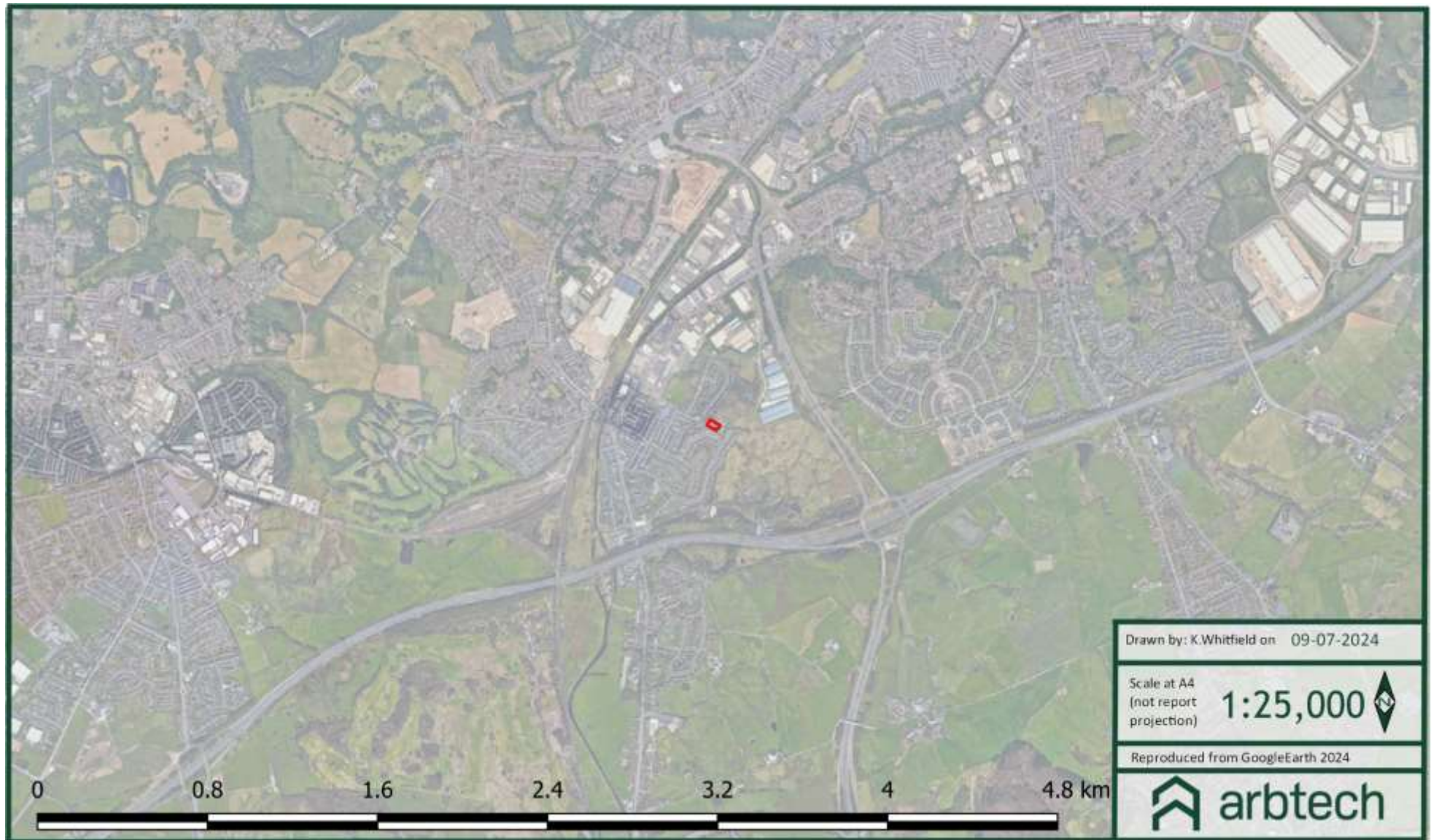
	• The use of night-time lighting will be avoided, or sensitive lighting design will be implemented to avoid light spill on to retained habitats which hedgehogs could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. 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.
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Appendix 1: Habitat map



Appendix 1a: PRA and Proposed BERS map

Appendix 2: Location map



Appendix 3: Proposed plan

Appendix 4: Photos

Photo	Photo Description
	Figure 1 – the interior of B1.
	Figure 2 – overview of B2.



Figure 3 – the interior of B2.



Figure 4 – the overview of B1 and visible damage to the walls.



Figure 5 – the overview of the western facing roof structure of B1.



Figure 6 – the damage to the brick wall of B1.



Figure 7 – the overgrown section of previously urban land to the southeastern corner of the site.



Figure 8 – the line of trees to the north of B1.



Figure 9 – the onsite sealed ground for carparking.



Figure 10 – the entrance to site.



Figure 11 – the northern section of garden.



Figure 12 – the overgrown garden.



Figure 13 – the overgrown garden to the south.



Figure 14 – B3.



Figure 14 – to the east of B3.



Figure 15 – the north of B1.



Figure 16 – the damaged mortar on the eastern section of B1.



Figure 17 – the lifted tiles on the eastern roof of B2.



Figure 18 the damaged mortar on the eastern roof structure of B2.

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