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Consultant Ecologist

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Preliminary Ecological Appraisal

Survey site:

Land Opposite New Waggoners Pub, Burnley, Burnley, BB11 5NS

Client:

Mr Chris Karoo

Survey date:

7th March 2024

Project:

This report is prepared to inform a planning application with the Burnley Borough Council. The proposal is described as:
The demolition of the on-site barn building and the construction of a dwelling under the same footprint.

Survey methodology and legislation can be found in the Arbtech Supplement: [PEA Methodology and Legislation - 2024.](#)

The site survey was undertaken by Jessica Sibley BSc (Hons) MSc, Consultant Ecologist (Accredited Agent on Natural England Bat Licence Number: 2022-10404-CL18-BAT).					
Date of survey	Temperature (°C)	Humidity (%)	Cloud Cover (%)	Wind (km/h)	Rain
07/03/2024	5	100	90	10	None

Ecological Survey Factor	Detailed using desk study and site survey (carried out under reasonable 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, PRA map in appendix 2, location plan in appendix 3, proposal plan in appendix 4 and photos in appendix 5).	
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) Primary Codes: Upland acid grassland [g1b] Building [u1b5] Other developed land [u1g6] Secondary Codes:	<p>The survey site is centred on National Grid Reference: SD 83015 29705 and has an area of approximately ~0.701ha. The site comprises one barn building, grassland, bare ground, hardstanding, and boundary features including a remnant dry stone wall and fencing, in a rural area south of Burnley, adjacent to Manchester Road (the A682), in a wider setting of upland landscape on the edge of the Pennines.</p> <p>The underlying geology of the site is sandstone (Old Lawrence Rock) with superficial Devensian till (diamicton) deposits, overlain by slowly permeable very acid upland soils with a peaty surface. Adjacent to the east and the south of the site is grassland, which is grazed by sheep. Adjacent to the west is Manchester Road (the A682), and adjacent to the north is a barn and developed land, with grassland further north. There is also a small line of trees north of the site. There is a small patch of 'Priority Deciduous Woodland' (designated under MAGIC) ~320m west of the site.</p>

<p>Bare ground [510] Dry stone wall [114] Fence [612]</p>	<p>boundary. An area of blanket bog is also located ~800m to the west of the site, and there is scattered lowland fen ~1.2km northeast, ~1.5km northwest, and ~1.7km east. The closest watercourse is Micklehurst Clough ~450m west of the site, however, a small network of wet ditches lies ~125m east of the site. The wider landscape comprises rural areas with small, sparse settlements, such as Clough Bridge and Dunnockshaw to the south and southwest of the site, respectively, with the larger settlement of Burnley to the north of the site. The landscape is very exposed, in which hedgerow-based shelter is scarce. The Micklehurst Clough is likely a major landscape feature for any wildlife moving around in the locale.</p> <p>Survey Limitations:</p> <p>The PEA survey was completed outside of the optimal survey period (April to October) limiting the identification of ground flora species. These limitations have been taken into account during the evaluation of the site and requirement for further surveys and mitigation.</p> <p>No Biological Records Data (BRD) was available at the time of writing this report. This should be obtained, and the report updated, to enable a robust ecological impact assessment to be completed.</p> <p><u>Upland acid grassland [g1b] with small sections of bare ground [510] bordered by a dry stone wall [114] and fenced [612]</u></p> <p>The majority of the site comprises sheep-grazed, bryophyte-rich acid grassland with an average sward height of ~5-10cm (up to ~40cm where rush <i>Juncus</i> sp., is present). Species include:</p> <p>A: Fescue <i>Festuca</i> sp.</p> <p>F: Poaceae sp., springy turf moss <i>Rhytidiadelphus squarrosus</i>, and pointed spear moss <i>Calliergonella cuspidate</i>.</p>
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	<p>O: Rush, rough stalked feather moss <i>Brachythecium rutabulum</i>, common feather moss <i>Kindbergia praelonga</i>, clover <i>Trifolium repens</i>, dock <i>Rumex</i> sp., dandelion <i>Taraxacum</i> sp., dead-nettle <i>Lamium</i> sp., hairy bittercress <i>Cardamine hirsuta</i>, tormentil <i>Potentilla erecta</i>, buttercup <i>Ranunculus</i> sp., <i>Geranium</i> sp., mouse-ear chickweed <i>Cerastium fontanum</i>, thistle <i>Cirsium</i> sp., daisy <i>Bellis perennis</i>, black medic <i>Medicago lupulina</i>, and water blinks <i>Montia fontana</i>.</p> <p>Grassland – condition indication:</p> <p>Sward height across the grassland is varied, with at least 20% <7cm tall and more than 20% >7cm tall, creating microclimates for insects, birds, and small mammals. Cover of bare ground is between 1-5% (~3%), including localised areas where vehicles have exposed the soil, and areas where peat is exposed. No bracken <i>Pteridium aquilium</i> or scrub was recorded across the habitat parcel. Cover of species indicative of suboptimal condition accounts for less than 5% of the total habitat area, and no non-native invasive species were recorded across the parcel.</p> <p><u>Other developed land [u1b6]</u></p> <p>To the south of the site is a hardstanding access drive and parking area, this habitat is generally considered to be low in ecological value.</p> <p><u>Buildings [u1b5]</u></p> <p>There is one barn building within the site. This building is considered in relation to roosting bats, later in this report.</p>
Foreseen Impacts	<p>The acid grassland habitat on-site may be a notable habitat. Furthermore, a small area of grassland will likely be lost as part of the proposed works/ via movement of machinery and vehicles, and the following use of the site as a dwelling and garden could degrade the grassland long-term.</p>

	Impacts are foreseen on the adjacent habitats from the operation of the development if left unmitigated (dust, litter, surface run off etc).
Recommendations	<p>A Phase 2 botanical survey will be required to determine if the acid grassland on the site is an important habitat. This survey must be undertaken between May to August. Should the grassland qualify as a habitat of principal importance a grassland management plan will be required outlining protection, compensation, and enhancement measures for the proposed development.</p> <p>Any car parking areas should be limited as much as possible in favour of planting areas and are recommended to use grasscrete or other porous surface treatment with as much botanical, vegetative elements as possible.</p> <p>Best practice measures to minimise the possibility of pollution affecting the nearby grassland must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this.</p>
Locality and Designated Sites	
Summary of Survey Findings	<p>Deer Pond Local Nature Reserve (LNR), and Lowerhouse Lodges LNR lie within a 4km radius of the site (~3.3km northeast and ~3.4km northwest, respectively).</p> <p>The site is not subject to any designation, and there are no known statutory sites nearby. No national network sites (SAC, SPA, Ramsar) are located within 2.5km.</p>
Foreseen Impacts	No direct impacts to any designated sites will occur as a result of the proposed development.
Recommendations	None required.
Invasive / Non-native species	
Summary of Survey Findings	No problematic invasive and non-native species were recorded on site.

Foreseen Impacts	N/A
Recommendations	No further surveys but remain vigilant.
Invertebrates	
Summary of Survey Findings	The site contains acid grassland which may contain some notable species of invertebrates, given the structure and the diversity of this grassland type.
Foreseen Impacts	Some acid grassland will be removed during construction. The loss of such habitats is likely to be inconsequential to local invertebrate populations owing to the small amount of suitable habitat to be lost and the presence of more extensive habitat locally. However, some notable species of invertebrates may be impacted by the proposed works (i.e., movement of machinery/vehicles).
Recommendations	An invertebrate scoping survey will be required to establish the possible value of the site for invertebrates and to determine whether further invertebrate surveys will be required. This should be undertaken between April and September in line with current survey guidelines (Natural England, 2005).
Bats	
Summary of Survey Findings	<p>There are three European Protected Species Licences (EPSLs) for bats, within a 4km radius of the site:</p> <p>EPSP2011-3489 – Common pipistrelle – ~2.4km northeast – Destruction of a resting place</p> <p>2018-34907-EPS-MIT – Common pipistrelle – ~2.9km northeast – Destruction of a resting place</p> <p>2019-40804-EPS-MIT – Common pipistrelle – ~3.1km northwest – Destruction of a resting place</p> <p><u>Foraging and commuting bats:</u></p> <p>On-site habitats comprise grassland, which is likely of low value to local foraging and commuting bats. However, this habitat could be used by local foraging and commuting bats, and bats dispersing from nearby roosts.</p> <p><u>Roosting bats (B1) – suitability assessment:</u></p>

	<p>B1 is a single-storey asbestos, brick and metal-built open barn building with a pitched and gabled roof clad in asbestos sheet roofing. The exterior of the building has a few features suitable for crevice-dwelling species of bat ingress (e.g., pipistrelles), including two locations where there are gaps into the cavity walls, along the southern elevation, as well as more suboptimal gaps between the asbestos sheet walls and the brick-built sections. The building was also subject to an internal inspection and there are missing skylights and open windows suitable for void-dwelling bat ingress. However, the interior of B1 is less suitable for void-dwelling bats given the exposure of the building internally to daylight. No evidence of roosting bats (e.g., droppings), was recorded internally of B1, however, evidence may be concealed in the cavity walls. B1 has low value for roosting bats, it is exposed internally and subject to daylight which may deter void-dwelling bats from roosting within B1, other than for transient periods, or at night. The features for crevice-dwelling species are also suboptimal as exposed or shallow, or only able to support small numbers for transient periods.</p>
Foreseen Impacts	<p>The demolition of B1 may result in the destruction of any bat roosts present and could cause disturbance, death, or injury to bats.</p> <p>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.</p>
Recommendations	<p>One bat emergence or re-entry survey is required during the active bat season (optimal May to August, suboptimal September) to confirm presence or likely-absence of a bat roost in B1. Infra-red cameras should be used as an aid.</p> <p>Three surveyors are required to provide full coverage of the building. If the absence of a bat roost cannot be determined during the first visit, then further surveys will be required. If bat roosts are confirmed in the building two additional surveys may be required to characterise the roost and to inform an EPSL application to Natural England. Surveys should be a minimum of three weeks apart. The EPSL application requires that surveys have been undertaken</p>

	<p>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.</p> <p>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</p> <p>The installation of two bat boxes at the site would provide additional roosting habitat for bats. The bat boxes can be installed on the new dwelling. Bat boxes should be positioned 3-5m above ground level facing in a south or south-westerly direction with a clear flight path to and from the entrance, away from artificial light. The bat boxes should be a specification suitable for crevice/void-dwelling species of bat such as:</p> <ul style="list-style-type: none"> Habibat Bat Access Tile (buildings) Integrated Eco Bat Box (buildings) Habibat Bat Box (buildings) Beaumaris Bat Box (buildings) <p>(Or a similar alternative brand).</p>
Birds	
Summary of Survey Findings	Evidence of pigeon activity was recorded within the on-site barn building (B1) (i.e., droppings and feathers). The building may be used by pigeons to nest. No habitat for Schedule 1 birds was observed for nesting but Schedule 1 species of birds associated with nearby designated sites may use the site to forage.
Foreseen Impacts	The proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.

Recommendations	<p>Demolition of B1 should be undertaken outside the period 1st March to 31st August. If this timeframe cannot be avoided, a close inspection of the building 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.</p> <p>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.</p>
Reptiles	
Summary of Survey Findings	<p>There are no EPSLs for reptiles within a 4km radius of the site.</p> <p>The grassland areas on-site provide good reptile habitat, although the sward is relatively short, and the structural diversity of the site is limited. The site provides good basking and commuting opportunities but lacks vegetation suitable for refuge and hibernation (e.g., scrub, tall-sward grassland, heathland), with the exception of the remnant section of dry stone wall. Isolated individuals may be present at the time of the works.</p>
Foreseen Impacts	<p>Although a small area of suitable habitat (i.e., grassland) will likely be impacted 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.</p>
Recommendations	<p>A precautionary working method will be implemented for widespread reptiles during construction, including the following measures:</p> <ul style="list-style-type: none"> Vegetation will be maintained at a short sward (5cm) within the work zone only, to discourage reptiles. Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.

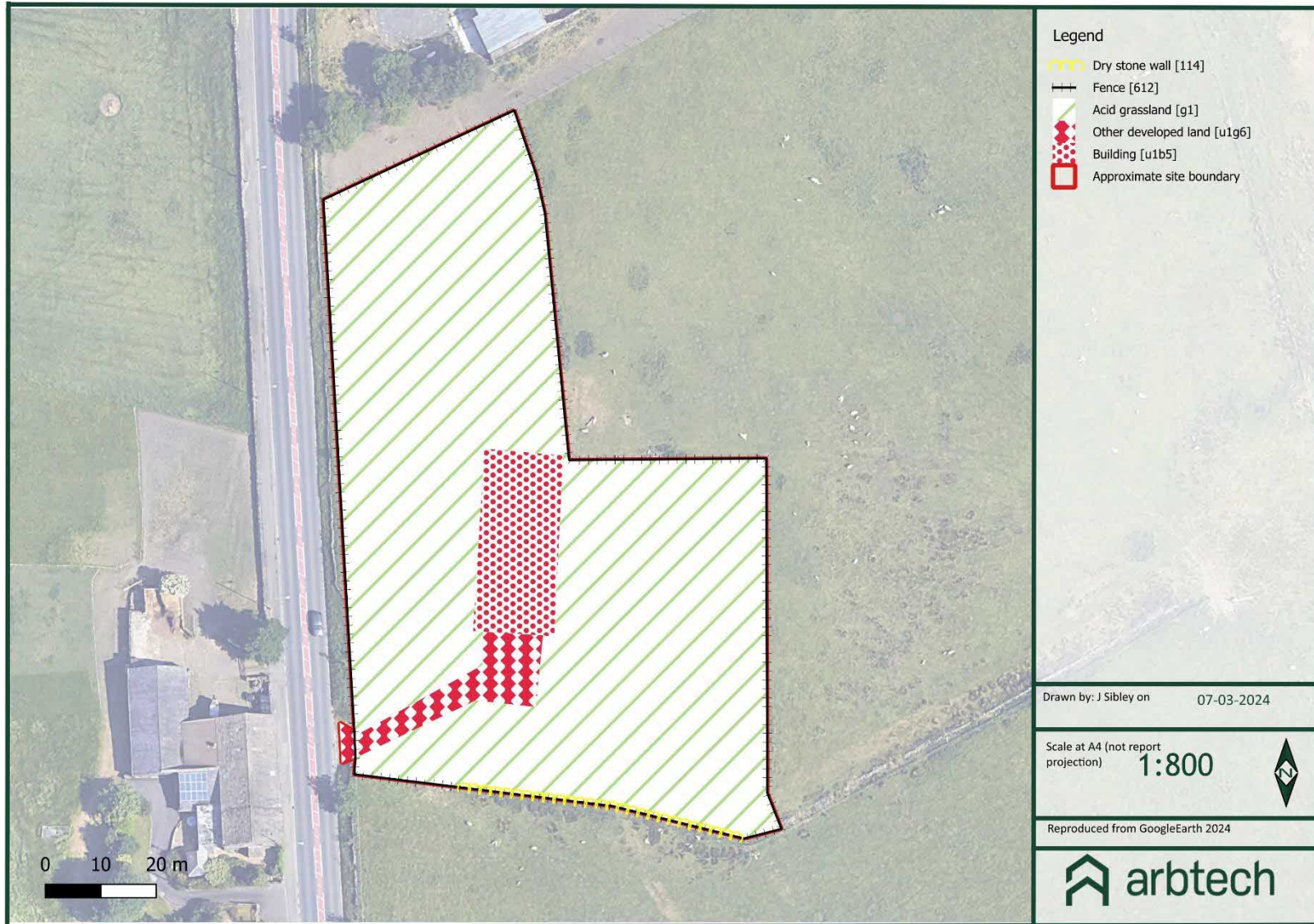
	<p>Best practice pollution prevention measures will be implemented to minimise impacts to nearby habitats.</p> <p>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p> <p>If any reptiles are found in the working area 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.</p> <p>In the unlikely event that a reptile is identified, works must cease and advice must be sought from a suitably qualified ecologist.</p> <p>The site could be enhanced for reptiles post development with the inclusion of log piles and a compost heap.</p>
<p>Amphibians</p>	
<p>Summary of Survey Findings</p>	<p>There are no EPSLs or class licence returns, and there is no pond survey data for Great Crested Newts (GCN) within a 500m radius of the site.</p> <p>There are no ponds on the site, and a review of aerial imagery indicates that there is one pond within a 500m radius of the site. This pond was not subject to a Habitat Suitability Index (HSI) assessment as it lies on third-party land and access was not possible, at the time of survey. P1 lies ~360m southwest from the site and is separated from the site by a busy road with curbs (Manchester Road), which is assessed to represent a significant barrier to dispersal.</p> <p>The site contains grassland and a remnant dry stone wall which provides good terrestrial opportunities for GCN and other more common amphibians for foraging, refuge, and hibernation. However, the presence of GCN within the site is unlikely, based on the lack of suitable connecting ponds to the site (i.e., possible GCN breeding ponds). Given that GCN exist in metapopulations that utilise multiple terrestrially connected ponds within 500m, an absence of</p>

	connecting ponds is likely to indicate an absence of GCN from the site, which significantly reduces the likelihood of GCN occurrence on-site during their terrestrial phase. There is a higher likelihood of common amphibian occurrence, as amphibians such as common toads have better mobility compared to newts and can travel further distances (including over suboptimal habitat).
Foreseen Impacts	Although a small area of suitable habitat (grassland) will likely be impacted as part of the development, there is a low risk that GCN could be present in the vicinity of the works, given the lack of connected ponds. However, more common amphibians may be impacted.
Recommendations	No further surveys are required. However, the precautionary working method adopted for reptiles, will also benefit common amphibians.
Badger	
Summary of Survey Findings	No evidence of badgers was found on or within 30m of the site (where accessible).
Foreseen Impacts	None foreseen.
Recommendations	<p>Basic precautionary mitigation during works is recommended:</p> <p style="padding-left: 40px;">Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</p> <p style="padding-left: 40px;">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.</p> <p style="padding-left: 40px;">Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p> <p>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.</p>

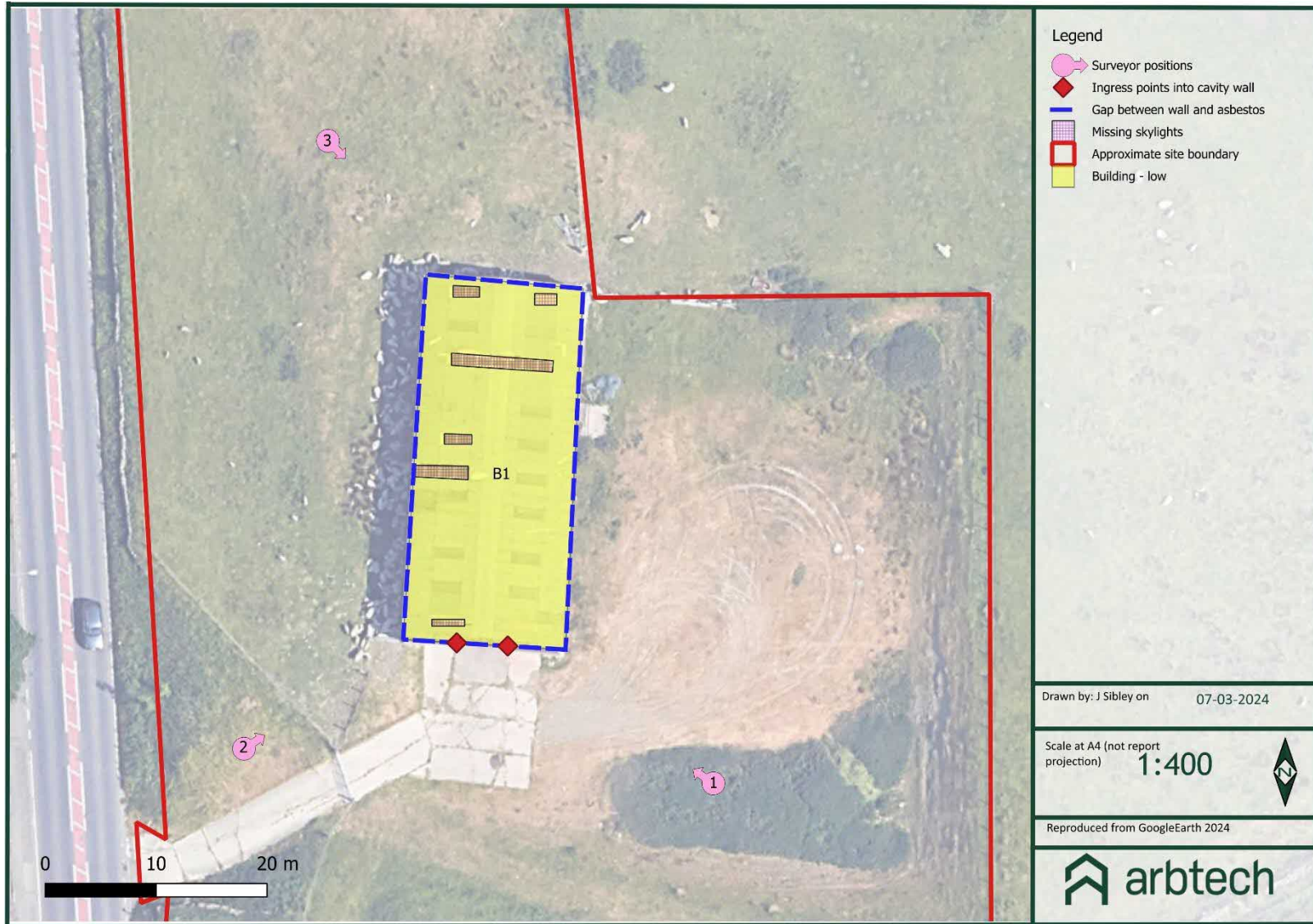
Riparian animals	
Summary of Survey Findings	There are no watercourses on or connected to the site.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.
Recommendations	N/A
Hazel dormouse	
Summary of Survey Findings	<p>There are no EPSLs for hazel dormouse within 4km of the site.</p> <p>The site lies outside of the known geographic range for hazel dormice (either natural or reintroduced). Furthermore, the site does not comprise the habitat required to support hazel dormouse (i.e., woodland, connected hedgerow networks). Hazel dormouse presence across the site is highly unlikely.</p>
Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of the proposed development.
Recommendations	None.
Other e.g. hedgehog	
Summary of Survey Findings	The site grassland provides foraging and commuting opportunities for hedgehogs.
Foreseen Impacts	A small area of grassland will likely be impacted during construction. The loss of such habitat is likely to be inconsequential to local hedgehog populations owing to its 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	<p>Similar to the badgers, a precautionary working method will be implemented during construction, including the following measures:</p> <p style="padding-left: 40px;">Any excavations will be covered overnight, or a ramp will be installed to enable any trapped animals to escape.</p>

	<p>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.</p> <p>Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations.</p> <p>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.</p> <p>The site could be enhanced for hedgehogs post-development with the inclusion of hedgehog houses and retention of fence gaps.</p>
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Appendix 1: Habitat map



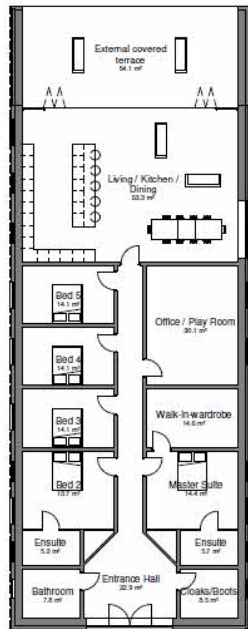
Appendix 2: PRA map



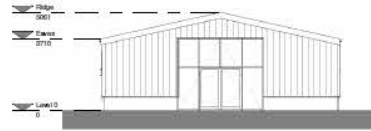
Appendix 3: Location map



Appendix 4: Proposed plan



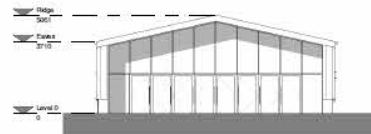
1 | Pro Level 0
1:100



2 | Pro South Elevation
1:100



3 | Pro East Elevation
1:100



4 | Pro North Elevation
1:100



5 | Pro West Elevation
1:100



6 | Proposed Perspective View

DRAFT



CON REGULATIONS 2014. All work drawings and specifications for the project must be read in conjunction with the Building Use and Construction Regulations 2014 and all other relevant legislation.

Designed with reference to the current information and plans held at Manchester City Council, Planning Department, License number 10002023.

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Rev	Date	Description
A	21/03/2023	Issue for Planning

Rev	Date	Author
1	02/03/2023	JK

Manchester Road Barn, Burnley (2347)
Proposed Floor Plan and Elevations

MRB-SVA-ZZ-ZZ-DR-A-2006
REV A
PLANNING

SOLIDVOID

Appendix 5: Photos



Photo 1: On-site grassland – south of the site facing north.



Photo 2: On-site grassland – close-up



Photo 3: Hardstanding access road and parking - south of the site facing west.



Photo 4: Remnant dry stone wall along the southern boundary of the site.



Photo 5: B1 exterior – facing the southern elevation.



Photo 6: Ingress opportunity into cavity wall by crevice-dwelling species.



Photo 7: Gap between asbestos wall and brick wall (suboptimal for crevice-dwelling).



Photo 8: B1 interior – facing north.

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