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Preliminary Ecological Appraisal and Roost Assessment

Survey site:

Woods Mount, Marsden, Huddersfield, HD7 6LA

Client:

Kirklees Council

Survey date:

04/07/2024

Project:

This report is prepared to inform a plans for creation of a SuDS pond by Kirklees Council.

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
04/07/2024	14	67	100	9	Yes

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 SE 05688 11774 and has an area of approximately 6.5ha. The site comprises one small outbuilding and grassland/heathland and lies adjacent to Marsden Moor. The site lies in a rural location within Huddersfield, with a largely upland and acidic topography. There are numerous habitats within the site including scattered trees, scattered scrub and hardstanding. Aerial imagery shows the local landscape to have a heathland character. Water bodies can be found nearby, such as a pond adjacent to the southern boundary of the site. Such features likely enhance the area for a variety of species, including bats, amphibians and reptiles.

	Limitations The survey was undertaken in the optimal period for botanical survey. Access to the interior of the building was not possible, and part of the woodland was not fully accessible due to fencing. **Notable Habitats** The site contains deciduous woodland and there is upland heathland directly adjacent to the site boundary, which are both mapped on MAGIC and upland heathland is listed as priority habitat and a habitat of principal importance under Section 41 of the Natural Environment and Rural Communities (NERC) Act (2006). The heathland is also consistent with the Annex 1 habitat-H4030 European dry heaths. Further notable habitats are present within close proximity to the site, including lowland heathland present approximately 1km north. The site also contains a mosaic of grassland and heathland communities which are of good quality and could be of value to local wildlife populations (as detailed in subsequent sections of this table). The remaining habitats are common and widespread and have low ecological value. No protected or notable plant species were recorded during the survey. The site lies on the western slope down from a moorland plateau and generally has an upland heath/moorland character. **On-site habitat descriptions** **u1b5** – Buildings A small brick building was present centrally within the site. This was approximately 4x4m and is of negligible ecological value, its value with regards to protected species is discussed later in the report.

	Condition assessment- **N/A.** Condition assessments are included in **Appendix 4.** **u1b6** – Other developed land A track was present along the southern and western portions of the site. This is of negligible ecological value. Condition assessment- **N/A.** **u1e** – Built linear features Stone walls in various states of disrepair were present across the site. Their value with regards to protected species are discussed later in the report. They have some value for lichen, as does the heathland. Condition assessment- **N/A.** **w1g** – Other broadleaved woodland Towards the south of the site lies an open access broadleaved woodland. Species include silver birch, Italian alder, grey alder and rowan. Ground flora includes bramble, rough meadow grass, male fern and holly. This woodland is young with a single age class present. Glades were present in this woodland. This woodland was in **Moderate** condition.

	w1h – Other woodland – mixed Other woodland within the site is dominated by larch and alder, with a ground flora of bramble, bilberry, Yorkshire fog and common bent. This woodland was also relatively young and fenced off. This woodland was present on the northern portion of the site with good connectivity to other stands of similar woodland. This woodland was in **Poor** condition. **H1b5-** dry upland heath- 10, 14, 16, 32, 114 The majority of the site consists of a mosaic of heathland and grassland, with the heathland being most concentrated to the eastern portion of the site. Shrubs comprise heather and bilberry with typical heathland flora such as sheeps fescue, wavy hair grass, heath rush, heath bedstraw, common cats ear, common sorrel, sweet vernal and red fescue. Mosses were also common including springy turf moss, Polytrichum sp. and a small amount of Sphagnum fallax in a particularly damp area of the heath, although the heath was predominantly dry. Lichens included Peltigera sp. The heathland contained encroachment of stands of rosebay willowherb, rhododendron and lower quality grasses such as false oat and rough meadow grass. This habitat appears to most closely match the NVC community H18 Vaccinium myrtillus–Deschampsia flexuosa heath. This habitat is currently in **moderate condition** and does not appear to be in current management via grazing, leading to the encroachment of grassland and larger stands of wavy hair grass. **g3c**– Other neutral grassland-10, 14, 16, 32, 128 The western portion of the site was comprised principally of a tall unmanaged sward of grasses and dominated by typically neutral grasses such as Yorkshire fog, false oat grass, annual meadow grass, cocks foot, rough meadow grass, perennial rye

	grass, sweet vernal grass and meadow foxtail. This grassland had wetter patches dominated by soft rush. Very few forbs were present within these stands but included creeping thistle, sorrel, meadow vetchling and white clover. Patches of bilberry were present across this habitat type along with scattered scrub and trees, including hawthorn, silver birch, beech and oak, along with scattered rosebay willowherb stands. This habitat appears to most closely match the NVC community MG10- *Holcus lanatus–Juncus effusus* rush-pasture. This habitat was in **moderate condition**. Please note, g3c and h1b5 were largely in a mosaic across the site, however, have been mapped according to the dominant habitat type in the land parcel.
Foreseen Impacts	**On-site habitats** Proposals have not yet been formalised, however, priority and high-quality habitat is present onsite, and there are further priority habitats in direct hydrological connectivity. Therefore, proposals have the potential to directly impact these habitats along with any rare or notable species found within them. **Notable habitats** Impacts to onsite and adjacent notable habitats are possible as a result of proposals.

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). A biodiversity net gain (BNG) report is unlikely to be required for the proposal as it is not a development proposal (one of the exemptions). It is recommended that the habitats to the east of the site bordering on Marsden moor are retained in order to limit impacts to any protected habitats. **Notable habitats** Best practice measures to minimise the possibility of pollution affecting the onsite and nearby priority habitat must be implemented during construction, especially considering the hydrological connectivity of these areas. A Construction Environment Management Plan (CEMP) may be required for this. A Phase 2 botanical survey/National Vegetation Classification (NVC) will be required by a suitably experienced botanist of level 4 or equivalent to determine if the mosaic of heathland and grassland on the site is a habitat of principal importance or Annex 1 habitat. A CHED+ fungi survey will also be required. It is recommended that all stone walls onsite be retained. If these are to be removed, further survey with regards to lichen will be required. Further recommendations will be dependent on the outcome of the further survey.

Locality and Designated Sites	
Foreseen Impacts	**Statutory and non-statutory designated sites** No direct impacts to any designated sites will occur as a result of the proposed development. However, due to the proximity of the site to South Penine Moors/Dark Peak SSSI's and the possible presence of non-statutory designations in the vicinity, indirect effects such as pollution or tree damage could occur during construction.
Recommendations	**On-site designations** None required. **Statutory and non-statutory designated sites** Best practice measures to minimise the possibility of pollution affecting the nearby designated sites must be implemented during construction. A Construction Environment Management Plan (CEMP) may be required for this. The Local Planning Authority (LPA) may be required to undertake a Habitat Regulations Assessment (HRA) to determine whether there could be any effect on nearby European sites as a result of the proposed development. The Local Planning Authority (LPA) may also be required to consult with Natural England regarding potential impacts to these SSSI's. The requirement for consultation and/or an HRA will be determined upon receipt of detailed proposals.
Invasive / Non-native species	
Summary of Survey Findings	Both rhododendron and Japanese knotweed were identified on the site which are both listed as an invasive, non-native species under Schedule 9 of the Wildlife and Countryside Act 1981.

	Rhododendron was discovered in patches centrally within the site, interspersed with other shrubs. Japanese knotweed was discovered adjacent to the most northernly woodland onsite, in a large and mature stand approximately 10x20m in size.
Foreseen Impacts	Construction could result in the spread of both invasive species. If left in situ, the invasive species will likely spread prolifically, impacting the onsite habitats.
Recommendations	**Japanese Knotweed** An invasive species management plan will be required to control and/or eradicate Japanese knotweed from the site. **Rhododendron** Rhododendron will be sensitively removed prior to the commencement of works to prevent the spread of a non-native, invasive species listed on Schedule 9 of the WCA. The Rhododendron will be removed using hand tools only. The most effective method of removal is through hand pulling, which results in minimal soil disturbance. Hand-pulling young shrubs will typically result in the full removal of the shrub and associated root network, which will prevent the re-establishment. Mature shrubs are likely to have a deeper and more established root network unlikely to be removed in full by hand pulling alone. Where there are mature shrubs, removal should be aided using hand tools to expose the root network in full so the entire shrub and associated roots can be removed. Development works will not commence until Rhododendron has been successfully removed from the site.
Invertebrates	
Foreseen Impacts	Habitats onsite are likely to be removed during construction. The loss of such habitats could result in a reduction in invertebrate habitat and could result in the fragmentation of the local landscape, dependent on the scope of proposals.

<table>
<tr><td>Recommendations</td><td>An invertebrate scoping survey may 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).

The requirement for this survey will be established when in receipt of an extensive plan for proposals.

Recommendations for enhancements can be established upon receipt of development proposals.</td></tr>
<tr><td colspan="2">Bats</td></tr>
<tr><td>Summary of Survey Findings</td><td>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. There are 2 EPSLs within a 2km radius of site as detailed below:

<table>
<tr><th>EPSL reference</th><th>Bat species affected</th><th>Distance from site</th><th>Impacts allowed by licence</th></tr>
<tr><td>2018-38561-EPS-MIT</td><td>Common pipistrelle, soprano pipistrelle</td><td>850m north</td><td>Destruction of a resting place</td></tr>
<tr><td>2015-12005-EPS-MIT-1</td><td>Common pipistrelle</td><td>1.5km west</td><td>Destruction of a resting place</td></tr>
</table>

The data search revealed numerous records of bats from within 2km of the site, the closest being a pipistrelle record approximately 180m from the site.</td></tr>
</table>

Foraging and commuting habitat

Habitats recorded on site are assessed to provide foraging and commuting opportunities for bats in the form of grassland, heathland, scattered scrub and woodland. These habitats are likely to provide micro-climatic conditions that support invertebrates that will in turn provide foraging opportunities for local bat populations.

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 very small brick built building with a concrete roof. The eastern elevation could not be accessed due to vegetation, however, no gaps in the bricks, mortar or concrete roof of this building were discovered from an external inspection.

No bats or evidence of bat occupation (e.g. droppings, oil staining, etc.) was identified externally in B1.

B1 Suitability Assessment

B1 does not have any features suitable for use by bats externally. There are also no access features into the interior of the building. Therefore, this building has **negligible potential** for roosting bats.

	Trees All trees within the scattered trees and woodland were young and/or had no features that could be utilised by bats for roosting.
Foreseen Impacts	**Roosting habitat** Bats are very unlikely to be roosting within the building or trees on site and as such, there are not anticipated to be any impacts on bats in this location as a result of the proposed development. **Foraging and commuting habitat** Given a lack of proposals it is unclear on the impact of proposals on foraging and commuting bats. However, if any extensive habitat removal is to be undertaken, this has the potential to negatively impact bats. **Artificial lighting** **It is unlikely that new lighting will be required by the proposals.**
Recommendations	**Roosting habitat [Buildings]** 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. **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 Bat activity surveys, comprising walked transects and static monitoring, may be required (dependent on proposals) to determine the usage of the site by foraging and commuting bats as well as to identify the likely presence or absence or any bat roosts in the vicinity, particularly those of high conservation value including maternity roosts. This will likely be required if impacts to any of the woodland are proposed. **Artificial lighting** Receipt of detailed plans will inform the requirement for a lighting strategy. **Suggested biodiversity enhancements** Enhancements are dependent on the outcome of further surveys.
Birds	
Summary of Survey Findings	The data search revealed records of numerous birds within 2km of the site, including redwing within 500m of the site. Many other species were recorded, including short eared owl and the red listed species mistle thrush. It is considered likely that an important number and/or species assemblage of birds are present surrounding the site. **Buildings** No evidence of nesting birds was identified on or within B1. B1 is deemed to provide negligible habitat value for nesting birds due to a lack of suitable nesting sites or access points.

	Trees and vegetation No bird nests were identified within the vegetation on-site, however they all offer nesting opportunities and nest-building resources for birds. The heathland onsite provides opportunities for numerous birds and it is noted that various birds were heard and seen onsite during the survey, including stonechat and collared dove. **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.

	Vegetation It is currently unknown which habitats will be removed during construction, however, the heathland and grassland onsite is likely of value to birds. The loss of such habitats could result in a reduction in nesting/breeding/foraging habitat. Furthermore, the proposed development could result in the destruction or the disturbance and subsequent abandonment of active bird nests.
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** Breeding bird surveys may be required to establish the value of the site for breeding birds. This will comprise three visits between April and June to record breeding activity (Gilbert et al, 1998). This is dependent on the scope and location of proposals.

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. The data search did not return any records of reptiles. **Habitat suitability** Habitats recorded on site are assessed to provide optimal foraging, commuting, and refuge opportunities for reptiles in the form of heathland, scattered scrub and woodland/scattered trees. It is considered likely that a population of reptiles is utilising the site. Features such as the stone walls in a state of disrepair provide optimal opportunities for basking invertebrates. There is also a record of sand lizard on NBN atlas within 4km of the site, therefore, the presence of rare reptiles cannot be discounted.
Foreseen Impacts	Although proposals have not yet been clarified, it is considered that the site provides optimal habitat for reptiles and therefore the loss of any habitats could result in a reduction in reptile habitat and could result in the fragmentation of the local landscape. Furthermore, site clearance could result in the death or injury of both common and rare reptiles, if present.
Recommendations	Reptile surveys will likely be required to determine presence or likely absence of reptiles on the site. This will comprise the deployment and monitoring of artificial refugia over seven visits and such surveys must be undertaken between April, May and September, in accordance with current survey guidelines (Gent & Gibson, 2003).

<table>
<tr><th colspan="2">Amphibians</th></tr>
<tr><td>Summary of Survey Findings</td><td>
EPSL and survey data
A review of the MAGIC database returned no granted EPSL records for great crested newts within 2km of the site. Further, no positive class survey licence return or DLL historic survey data (2017 – 2019) were present within 2km of the site.

The data search did not return any records of great crested newt, although records of all other common amphibians were returned within 2km of the site.

Habitat suitability
There are no ponds on the site, but a review of aerial imagery (MAGIC and OS Maps) indicates the presence of three ponds within 500m; the closest pond (P1) is located adjacent to the site to the south. P2 and P3 are located approximately 500m north and east respectively. The site itself provides suitable habitat for common amphibians, with wetter areas and heathland and woodland. The connectivity between these ponds is limited, however, there is the possibility of amphibian presence onsite, especially to the south of the site.

<table>
<tr><th>Pond</th><th>Grid Reference</th></tr>
<tr><td>P1</td><td>SE 05573 11516</td></tr>
<tr><td>P2</td><td>SE 06023 12277</td></tr>
<tr><td>P3</td><td>SE 06293 12015</td></tr>
</table>
</td></tr>
</table>

	The site is outside of the known range of great crested newts, and the nearest licence granted is approximately 13km east of the site.
Foreseen Impacts	Records from the local records centre will be required to assess further the probability of great crested newts being present onsite. Full development proposals will also be required to assess impacts.
Recommendations	Dependent on proposals, further surveys for great crested newts may be required in order to assess impacts on this protected species.
Badger	
Summary of Survey Findings	No badger setts were noted on site or within a 30m radius of the site. Further, no evidence of foraging badgers was noted within the development area. However, the site was considered suitable for badger sett excavation and foraging habitat. No badger records were returned in the data search.
Foreseen Impacts	Depending on proposals, construction could result in the damage/disturbance/destruction of the badger sett on the site and could kill or injure any badgers present.

Recommendations	Depending on the extent of vegetation removal and proximity to woodland/sett building habitat, an updated badger survey may be required prior to proposals/construction. Depending on proposals, it is likely that a precautionary working method will be implemented during construction, including the following measures: • A toolbox talk will be given to contractors regarding the possible presence of badgers at the site. • A pre-commencement inspection of the site will be undertaken for any new badger activity if works do not commence within three months. • Heras fencing will be erected around the working area to prevent encroachment into retained habitats where badger setts could be present. • 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 badgers could use. • Any chemicals or pollutants used or created by the development should be stored and disposed of correctly according to COSHH regulations. In the unlikely event that a badger sett is identified, works must cease and advise must be sought from a suitably qualified ecologist.
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. No records of otter were returned in the data search, however, there was a water vole record returned from over 1km away from the

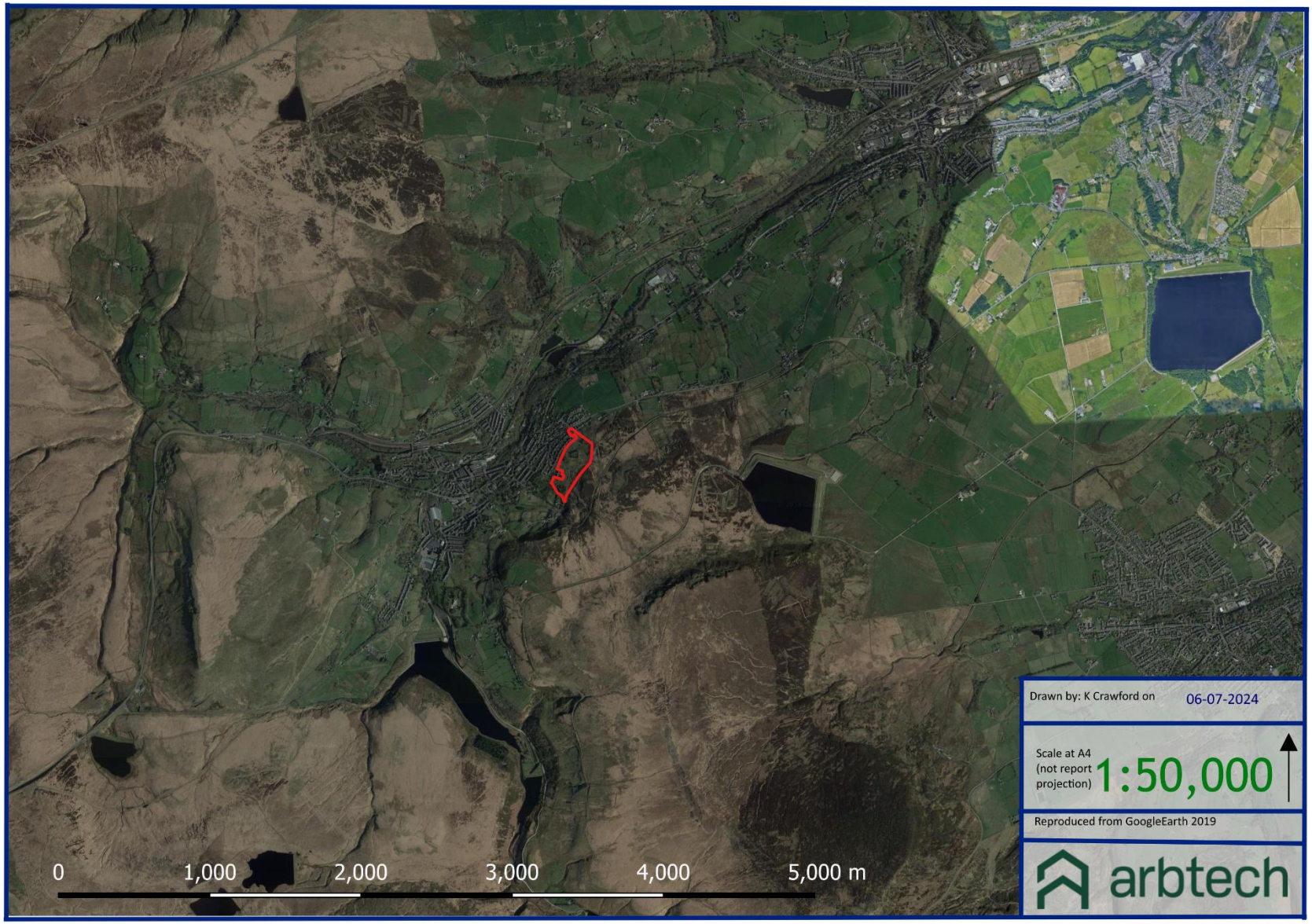
	site. There are no water courses on or connected to the site. There are also no riparian habitats present on site or within an influencing distance.
Foreseen Impacts	No impacts are anticipated on riparian animals as a result of the proposed development.
Recommendations	None required.
Hazel dormouse	
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. No records of dormouse were returned in the data search. **Habitat suitability** The site lies outside of the know current range for hazel dormice and there are no suitable habitats within the development area. As such it is considered likely that hazel dormice are absent from site.
Foreseen Impacts	No impacts are anticipated on hazel dormice as a result of any proposals.
Recommendations	None foreseen.

Other e.g. hedgehog	
Summary of Survey Findings	The grassland and heathland onsite provides foraging and commuting opportunities for hedgehogs, with woodland habitat nearby. Development is also present near the site which is suitable for supporting hedgehogs. Hedgehog records were returned in the data search from approximately 750m away from the site, and another from over 1km.
Foreseen Impacts	Dependent on the extent of habitat removal during construction, construction activities could result in the death or injury of hedgehogs, if present.
Recommendations	Depending on the extent of proposals, for hedgehog and badgers, a precautionary working method may be required to 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: Photos



Photograph 1- Other Broadleaved woodland within the Site.



Photograph 2- Access path within the site.



Photograph 3- Other developed land and upland heathland present within the site. In the background lies other woodland- mixed.



Photograph 4- Upland heathland within the site.



Photograph 5- Other neutral grassland present onsite, high sward height and unmanaged.



Photograph 6- B1



Photograph 7- Other woodland, mixed.



Photograph 8- Example of rhododendron onsite



Photograph 9- Japanese knotweed onsite.



Photograph 10- Example of stone wall onsite.



Photograph 11- Example of bilberry encroachment in grassland areas.

Appendix 4- Condition Assessment Sheets

UK Habitat Classification (UKHab) Habitat Types
Woodland and forest - Lowland beech and yew woodland **Woodland and forest - Lowland mixed deciduous woodland** **Woodland and forest - Native pine woodlands** **Woodland and forest - Other coniferous woodland** **Woodland and forest - Other Scot's pine woodland** **Woodland and forest - Other woodland; broadleaved** **Woodland and forest - Other woodland, mixed** **Woodland and forest - Upland birchwoods** **Woodland and forest - Upland mixed ashwoods** **Woodland and forest - Upland oakwood** **Woodland and forest - Wet woodland**

Habitat Description
First Score= Other broadleaved woodland Second= Other woodland mixed

Ukhab – UK Habitat Classification

This condition sheet is based on the England Woodland Biodiversity Group (EWBG) Woodland Condition Survey Method, available here:

Woodland Wildlife Toolkit (sylva.org.uk)

IMPORTANT: This biodiversity metric woodland condition assessment must be used to assess woodland being input into the biodiversity metric. The outputs of this condition assessment are not equivalent to, nor are they comparable with the scores from the EWBG condition assessment, because the EWBG assessment has been adapted for the biodiversity metric, including the removal of EWBG Indicator 7 (Proportion of favourable land cover around woodland) and Indicator 14 (Size of woodland), and minor changes to other indicators.

On-site or off-site, site name and location		**Survey date and Surveyor name**	05/07/24 KC	**Habitat parcel reference**											
				Other Broadl	Other mixed										
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	Woods Mount	**Grid reference**											

Condition Assessment Criteria																
Indicator		**Good (3 points)**	**Moderate (2 points)**	**Poor (1 point)**	**Score per indicator**										**Notes (such as justification)**
A	**Age distribution of trees**	Three age-classes[1] present.	Two age-classes[1] present.	One age-class[1] present.	1	1									
B	**Wild, domestic and feral herbivore damage**	No significant browsing damage evident in woodland[2].	Evidence of significant browsing pressure is present in less than 40% of whole woodland[2].	Evidence of significant browsing pressure is present in 40% or more of whole woodland[2].	3	3									
C	**Invasive plant species**	No invasive species[3] present in woodland.	*Rhododendron Rhododendron ponticum* or cherry laurel *Prunus laurocerasus* not present, and other invasive species[3] <10% cover.	Rhododendron or cherry laurel present, or other invasive species[3] ≥10% cover.	3	1									
D	**Number of native tree species**	Five or more native tree or shrub species[4] found across woodland parcel.	Three to four native tree or shrub species[4] found across woodland parcel.	Two or less native tree or shrub species[4] across woodland parcel.	2	2									
E	**Cover of native tree and shrub species**	>80% of canopy trees and >80% of understory shrubs are native[5].	50 - 80% of canopy trees and 50 - 80% of understory shrubs are native[5].	<50% of canopy trees and <50% of understory shrubs are native[5].	3	1									
F	**Open space within woodland**	10 - 20% of woodland has areas of temporary open space[6]. Unless woodland is <10ha, in which case 0 - 20% temporary open space is permitted[7].	21 - 40% of woodland has areas of temporary open space[6].	<10% or >40% of woodland has areas of temporary open space[6]. But if woodland <10ha has <10% temporary open space, please see Good category[7].	3	3									
G	**Woodland regeneration**	All three classes present in woodland[8]; trees 4 – 7 cm Diameter at Breast Height (DBH), saplings and seedlings or advanced coppice regrowth.	One or two classes only present in woodland[8].	No classes or coppice regrowth present in woodland[8].	1	1									
H	**Tree health**	Tree mortality 10% or less, no pests or diseases and no crown dieback[9].	11% to 25% tree mortality and or crown dieback or low-risk pest or disease present[9].	Greater than 25% tree mortality and or any high-risk pest or disease present[9].	3	3									
I	**Vegetation and ground flora**	Recognisable NVC plant community[10] at ground layer present, strongly characterised by ancient woodland flora specialists.	Recognisable woodland NVC plant community[10] at ground layer present.	No recognisable woodland NVC plant community[10] at ground layer present.	2	2									
J	**Woodland vertical structure**	Three or more storeys across all survey plots, or a complex woodland[11].	Two storeys across all survey plots[11].	One or less storey across all survey plots[11].	1	1									
K	**Veteran trees**	Two or more veteran trees[12] per hectare.	One veteran tree[12] per hectare.	No veteran trees[12] present in woodland.	1	1									
L	**Amount of deadwood**	50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, branch stubs and stumps, or an abundance of small cavities[13].	Between 25% and 50% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	Less than 25% of all survey plots within the woodland parcel have deadwood, such as standing and fallen deadwood, large dead branches and or stems, stubs and stumps, or an abundance of small cavities[13].	1	1									
M	**Woodland disturbance**	No nutrient enrichment or damaged ground evident[14].	Less than 1 hectare in total of nutrient enrichment across woodland area, and or less than 20% of woodland area has damaged ground[14].	1 hectare or more of nutrient enrichment, and or 20% or more of woodland area has damaged ground[14].	3	3									
				Total Score (out of a possible 39)	27	23									

Condition Assessment Result	Condition Assessment Score	Result Achieved									
Total score >32 (33 to 39)	Good (3)										
Total score 26 to 32	Moderate (2)	Y									
Total score <26 (13 to 25)	Poor (1)		Y								

UK Habitat Classification (UKHab) Habitat Types
Heathland and shrub - Lowland heathland **Heathland and shrub - Mountain heaths and willow scrub** **Heathland and shrub - Upland heathland**
Habitat Description

ukhab – UK Habitat Classification

On-site or off-site, site name and location		**Survey date and Surveyor name**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type - the appearance and composition of the vegetation closely matches its UKHab description, with vascular and non-vascular characteristic indicator species consistently present.[1] **Note - this criterion is essential for achieving Good condition.**	N	
B	There are at least two dwarf shrub species Frequent[2], and cover of dwarf shrubs is between 25-75% for lowland heathland, 50-75% for upland dry heath, or >20% for upland wet heath. **Note - this criterion is essential for achieving Good condition.**	N	
C	All heather *Calluna vulgaris* age-classes (pioneer, degenerate and mature) present with at least 10% pioneer heather in the lowlands or at least 10% degenerate or mature in the uplands. **Note - this criterion is essential for achieving Good condition.**	N	
D	Unshaded bare ground is between 1-10%. **Note - this criterion is essential for achieving Good condition.**	Y	
E	There is an absence of invasive non-native plant species listed on Schedule 9 of WCA[3] and shallon *Gaultheria shallon*[4]. **Note - this criterion is essential for achieving Good condition.**	N	
F	No signs of disturbance of sensitive areas[5], including managed burns.	Y	
G	No more than 33% of heather shoots have been recently grazed, or flowering heather plants are at least Frequent[2] in autumn.	Y	
H	The canopy cover of scattered trees and or scrub (not including gorse *Ulex* spp.) is: •less than 20% for upland heaths; •less than 15% for lowland dry heaths; and •less than 10% for lowland wet heaths.	Y	
I	Total gorse cover is less than 50%, with common gorse *Ulex europaeus* less than 25%.	Y	
J	The cover of bracken *Pteridium aquilinum* is less than 5%[6].	Y	
K	No signs of any damaging activities[7] or contamination to the habitat such as: artificial drains, peat extraction, silt, leachate or eutrophication.	Y	
	Essential criteria for achieving Good condition achieved (Yes or No)	N	
	Number of criteria passed	7	

Condition Assessment Result (out of 11 criteria)	Condition Assessment Score	Score Achieved ×/✓
Passes 9 - 11 criteria including all essential criteria A - E.	Good (3)	
Passes 7 or 8 criteria; OR Passes 9 - 10 criteria but fails any essential criteria (criteria A - E).	Moderate (2)	Y
Passes 6 or fewer criteria.	Poor (1)	

UK Habitat Classification (UKHab) Habitat Types
Grassland - Lowland calcareous grassland **Grassland - Lowland dry acid grassland** **Grassland - Lowland meadows** **Grassland - Other lowland acid grassland** **Grassland - Other neutral grassland** **Grassland - Tall herb communities (H6430)** [Not to be confused with the Tall forbs secondary code – see UKHab guidance for details.] **Grassland - Upland acid grassland** **Grassland - Upland calcareous grassland** **Grassland - Upland hay meadows** **Sparsely vegetated land - Calaminarian grassland**

On-site or off-site, site name and location		**Survey date and Surveyor name**	
Limitations (if applicable)		**Survey reference (if relating to a wider survey)**	
Grid reference		**Habitat parcel reference**	

Habitat Description

ukhab – UK Habitat Classification

	Condition Assessment Criteria	Criterion passed (Yes or No)	Notes (such as justification)
A	The parcel represents a good example of its habitat type, with a consistently high proportion of characteristic indicator species present relevant to the specific habitat type (and relative to Footnote 3 suboptimal species which may be listed in the UKHab description).[1] **Note - this criterion is essential for achieving Moderate or Good condition for non-acid grassland types only.**	Y	
B	Sward height is varied (at least 20% of the sward is less than 7 cm and at least 20% is more than 7 cm) creating microclimates which provide opportunities for insects, birds and small mammals to live and breed.	N	
C	Cover of bare ground is between 1% and 5%, including localised areas, for example, rabbit warrens[2].	Y	
D	Cover of bracken *Pteridium aquilinum* is less than 20% and cover of scrub (including bramble *Rubus fruticosus* agg.) is less than 5%.	Y	
E	Combined cover of species indicative of suboptimal condition[3] and physical damage (such as excessive poaching, damage from machinery use or storage, damaging levels of access, or any other damaging management activities) accounts for less than 5% of total area. If any invasive non-native plant species[4] (as listed on Schedule 9 of WCA[5]) are present, this criterion is automatically failed.	N	
	Additional Criterion - must be assessed for all non-acid grassland types		
F	There are 10 or more vascular plant species per m^2 present, including forbs that are characteristic of the habitat type (species referenced in Footnote 3 and 5 cannot contribute towards this count). **Note - this criterion is essential for achieving Good condition for non-acid grassland types only.**	N	
	Essential criterion for Good condition achieved (for non-acid grassland) (Yes or No)	N	
	Number of criteria passed	3	

Condition Assessment Result	Condition Assessment Score	Score Achieved x/✓
Acid grassland types (Result out of 5 criteria)		
Passes 5 criteria	Good (3)	
Passes 3 or 4 criteria	Moderate (2)	
Passes 2 or fewer criteria	Poor (1)	
Non-acid grassland types (Result out of 6 criteria)		
Passes 5 or 6 criteria, including essential criterion A and additional criterion F.	Good (3)	
Passes 3 - 5 criteria, including essential criterion A.	Moderate (2)	Y
Passes 2 or fewer criteria; OR Passes 3 or 4 criteria excluding criterion A and F.	Poor (1)	

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Proof	0.2	Fay Brotherhood BSc (Hons) MSc, Consultant	10/07/2024
Draft	0.3	Katie Crawford BSc MRes ACIEEM	14/07/2024
Proof	0.4	Mel Reid BSc (Hons) MRes MRSB, Senior Consultant	16/08/2024
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