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Date: 4th January 2024
Email: chris.schofield@enzygo.com

Newfields BESS Ltd [the Client]
Cumberland Court,
80 Mount Street,
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RE: Ecology Walkover and Assessment Note – Newfields Farm, Stoke-on-Trent

Further to recent correspondence, and your request for an Ecologist to conduct an Ecology site walkover survey and assessment at Newfields Farm, Rownall Road, Wetley Rocks, Stoke-on-Trent, ST9 0BS, please find enclosed details of the survey undertaken, the survey results and guidance.

Background

On 28th April 2023, Enzygo were commissioned by Newfields BESS Ltd for an Ecology walkover survey and assessment in relation to proposals for a Battery Energy Storage System (BESS) at Newfields Farm. It is understood that a site walkover was needed to assess current site conditions and update the previous Preliminary Ecological Appraisal conducted by Phlorum in December 2021.

This document presents details of a walkover survey and assessment undertaken by a suitably qualified Ecologist in order to confirm the potential impacts of the proposals on habitats, flora, and fauna, and to confirm any specific avoidance and mitigation measures which are required in accordance with BS42020:2013.

Methodology

A walkover survey covering the area of the proposed BESS and immediately adjacent habitats was undertaken by a suitably qualified Ecologist in order to inform this assessment.

Survey Date: Friday 5th May 2023

Surveyor: Melissa Finch MSc BSc (Hons) QCIEEM [Assistant Ecologist at Enzygo and Experienced Field Surveyor]

Weather Conditions: Dry (40% cloud cover), with a light wind (Beaufort Scale 2) and 15°C.

The surveyor conducted a survey of all areas within the redline boundary, including the main field, surrounding woodland and field boundaries, and proposed access road through the farm buildings and to Rownall Road to the east. The survey comprised recording broad habitats and vegetation assemblages, a general search for evidence of protected and notable species, as well as an assessment of the possibility of presence and habitat suitability for these species, particularly where uncommon or specialised habitats are present in accordance with current guidance (CIEEM, 2017). No significant survey or assessment limitations were experienced with the survey conducted at an appropriate time of year and under appropriate conditions.

Results and Guidance

The survey area was found to be predominantly comprised of modified grassland presumably used to graze livestock, with a strip of woodland to the north, hedgerow and woodland to the east, a farmhouse and fields for pasture to the south, an immature hedgerow to the southwest, and intermittent hedgerow with trees and a stream beyond the western boundary.

The access road leading to the farmhouse and associated buildings is hardstanding, as are areas within. The road is lined on one side (to north) with mature Beech, Oak and Silver Birch trees. A public right of way was observed in the northeast corner of the site, which is surrounded by dense mixed scrub, and a public footbridge is located to the southeast.

Insert 1: Survey Area



Green Infrastructure

The boundary habitats comprise trees and hedgerows which provide significant green infrastructure and wildlife corridor function. There is a risk that green infrastructure could be damaged at the site during the construction phase and degraded from artificial light pollution during the construction and operational phases of development.

Boundary habitats should be protected throughout the construction phase in accordance with BS5837:2012 *Trees in relation to design, demolition, and construction*. Recommendations include installing and maintaining appropriate protection fencing.

To minimise the potential for habitat degradation through excessive artificial lighting overspill, an appropriately designed lighting scheme will be implemented during construction and operation of the site, making use of suitable products such as directional, low-level, capped, screened and/or low-lux lighting.

The final site layout should be designed to retain as much existing green infrastructure as is possible to permit development, and any hedgerow and/or trees lost to the development should be replaced on a 1:1 basis.

Invasive Species

Japanese Rose (*Rosa rugosa*) was discovered in the northwestern corner of the site and is identified as an invasive species under Section 9 of flora in the Wildlife and Countryside Act 1981.

In this instance considering the species present and extent, a detailed invasive species eradication plan is not necessary. Instead, it is recommended that this species is grubbed out by the roots and either buried on site or otherwise disposed of off-site responsibly.

Blue Infrastructure

There is a watercourse that runs along field boundary to the west of the site and was identified in the 2021 PEA as a feature of notable value. A minor ditch also runs along the eastern boundary between the site and adjacent area of woodland.

To avoid potential pollution and run-off impacts on blue infrastructure, a large undeveloped buffer of a minimum of 20m has been incorporated into the site layout. In addition, all construction works will be undertaken in accordance with best practice and the through adoption of the appropriate Environment Agency guidance (refer to updated 2019 Environment Agency guidance “*Pollution prevention for businesses*” [Pollution prevention for businesses - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/pollution-prevention-for-businesses)). This includes appropriate storage of chemicals, controlled refuelling of vehicles, spill kits etc.

Great Crested Newt

A small pond was identified within the area of woodland immediately to the east of the site that was not identified in the 2021 PEA. The pond contains a limited amount of vegetation and is relatively deep, with a sign nearby warning of its deep waters. The existence of the pond raises concerns regarding the potential for Great Crested Newt (GCN) (*Triturus cristatus*) to be impacted by the development.

The NatureSpace Partnership Staffordshire Moorlands District Council Impact Risk Zones map indicated that the site is in a low-risk zone (white) for GCN presence, which is “low habitat suitability – low probability of great crested newt presence”. A search of MAGIC Maps by Defra has confirmed that no additional ponds are situated within 300m of the site and so the pond is relatively isolated within the landscape, though there are four ponds are within a wider 500m radius. The 2021 PEA report states the “site offered negligible potential for breeding newts and low potential for foraging and commuting newts.” It is confirmed the short-grazed species-poor nature of the grassland habitat to be impacted represents significantly poor suitability terrestrial habitat for GCN, and it is considered unlikely to attract any GCN from the wider area. Magic Map also does not indicate any previous GCN EPS licence applications, Class Licence return records, or positive eDNA survey results within a 2km radius.

It is considered reasonable and appropriate in this instance to recommend non-licensed avoidance measures to mitigate the significantly low risk of encountering GCN during the works. In accordance with best practice, Reasonable Avoidance Measures (RAMS) will be followed.

This would include the following:

- Prior to any works commencing, contractors will be briefed about the presence of nearby ponds, the possible presence of Great Crested Newt (GCN), and what to do if a GCN is discovered during construction.
- The Main Contractor will direct its staff and subcontractors regarding the possible presence of GCN’s and be responsible for the measures outlined in this document being enforced.

- Site operatives will keep a watching brief throughout the construction phase, especially during initial ground clearance operations.
- Any vegetation works, including the removal of taller vegetation (above 15cm) and other vegetation will be undertaken using hand tools.
- Ground clearance works will be carried out during the day when GCN are unlikely to be active.
- All building and other materials will be stored on pallets to prevent newts using them as refuges.
- Any trenches excavated will be covered at the end of the working day to avoid animals falling into the trench. If this is not possible escape routes will be provided. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches. Ramps should be no greater than of 45 degrees in angle. Ideally, any holes should be securely covered.
- Any excavations required to be left open overnight or longer should be checked for animals prior to the continuation of works or infilling. Any excavated material should be placed on boards or sheeting. If left overnight this material should be searched prior to being used as infill.
- In the unlikely event that a GCN is unexpectedly encountered, all work will stop whilst advice is sought from a licensed qualified Ecologist / Natural England, as required, to determine whether the works can proceed or not.
- A copy of this RAMs document will be kept on site.

This non-licensed approach is deemed proportionate and justified considering the nature and scale of the works, the habitats present, and the low risk of killing/injury of GCN. Natural England provide advice on non-licensed approaches and avoiding the need for over-precautionary licence applications including *“in recent years there has been a trend towards increasingly precautionary applications, resulting from a risk-averse approach to mitigation. Whilst considering potential risks to great crested newts is laudable, many recent mitigation schemes were designed for developments that actually had very little or no effect on the newt population”* and *“Natural England is concerned about the trend for increasingly risk-averse mitigation for several reasons”*. As such, a non-licensed approach is deemed proportionate and justified in this instance and no further survey necessary to inform this assessment.

Bats

The mature trees and hedgerow habitats that line the site boundaries, as well as offsite adjacent woodland provide suitable roosting, foraging, and commuting habitat for bats.

The protection measures highlighted above in relation to physical protection of trees, lighting and pollution prevention will minimise the risk of degradation of the favourable foraging and commuting habitats and reduce the risk of killing/injuring bats roosting in trees.

The lighting scheme should be designed in accordance with the recent guidance *Bats and artificial lighting at night* (ILP, 2023) incorporating products such as directional lighting with column backplates, and downlighters, which shall minimise artificial lighting overspill onto suitable bat foraging and commuting habitats.

If no tree felling or cutting of trees is required, and habitats can be protected from damage and/or degradation with the use of appropriate fencing and sensitive lighting, then no further surveys would be necessary to inform this assessment.

Nesting Birds

The hedgerow and trees along the northern, eastern, and southern boundaries provide potential habitat for a limited range of nesting birds which are likely to be present in the local landscape. The open grassland area also provides a limited extent of suboptimal habitat for ground-nesting farmland species such as Skylark (*Alauda arvensis*), although no incidental observations were noted during the walkover survey. In addition, Skylark are known to typically establish nest sites in locations at least 50-100m from tall boundary features such as trees, hedgerows and buildings, and therefore the relatively small and enclosed nature of the site severely limits the suitability for this species.

In order to avoid any offence in respect of nesting birds, it is recommended that site clearance and any proposed felling or cutting back of overhanging trees is either conducted outside of the bird nesting season (March to August inclusive) or is conducted following a nesting bird check by a suitably qualified Ecologist or Ecological Clerk of Works.

Given that birds can commence nesting at any time during the breeding season, any absence of nesting birds confirmed by a nesting bird check becomes invalid after a few days. It is therefore recommended that any required nesting bird check is conducted immediately prior (i.e. a day or two) the vegetation clearance, or with an Ecologist present directly supervising.

In the event an active nest is detected or suspected, all works in the area should cease immediately and an Ecologist contacted for advice. A species-appropriate protective buffer zone (to be confirmed by a suitably qualified Ecologist), would be established around the nest, and guidance will be given on the status of the nest (e.g., age of the chicks) to provide an estimate of when the chicks will have fledged, and the nest will be no longer active. A further check would then be required by a suitably qualified Ecologist to confirm the nest is no longer active prior to the recommencement of works.

In addition, as best practice, a precautionary approach should be undertaken with all contractors aware of the potential presence of nesting birds and the protocol should an active nest be detected.

Badgers

A search for activity was conducted across the site, around the site boundaries and within the adjacent woodland.

No evidence of Badger (*Meles meles*) was found during the 2023 survey, nor reported in the 2021 PEA. As such, it is assumed that they are not currently active at the site, though it may be used for foraging and commuting.

To negate the risk of accidentally injuring or killing a badger during the construction phase, works shall be undertaken in accordance with a set of best practice precautionary RAMS. Following the site clearance phase the following RAMS should be adhered to (with all relevant site contractors informed of these details) throughout the construction phase:

- No works will be conducted at night, or dawn/dusk when Badgers are likely to be active;

- Any holes, trenches or other excavations in which Badger may fall into and become trapped will be covered overnight, or otherwise a means of escape provided (e.g. a plank of wood as a ramp);
- If piles of soil are to be stored within the site, these will be left un-compacted and not permitted to grass over to reduce the likelihood of Badger using them for new sett creation;
- Any pipes must be stored with caps on to prevent Badger access; and,
- Any chemicals will be stored securely so that they cannot be accessed by inquisitive Badger.

Priority Mammals

The habitats onsite are typical of the farmed landscape and may provide limited shelter, refuge, or foraging opportunities for priority fauna such as Hedgehog (*Erinaceus europaeus*) and Brown Hare (*Lepus europaeus*).

The construction phase should implement a series of best practice precautionary measures to minimise the risk of killing/injury of wildlife such Brown Hare. Similar to RAMS recommended above for Badger, this shall include avoiding leaving open any pits or trenches in which wildlife may become trapped. Any trenches or pits in which wildlife may become trapped should either be covered, infilled, or a suitable means of escape provided (e.g., plank of wood) overnight. Any wildlife discovered at the site should be either allowed to disperse into offsite areas or relocated by hand.

No other specific avoidance or mitigation measures in relation to Ecology are required or recommended in relation to the installation of the new BESS.

I trust this letter satisfies your requirements.

Please contact me if you have any queries.

Yours sincerely,

Chris Schofield – Principal Ecologist
Enzygo Ltd

Appendix: Site Photographs



Western boundary watercourse with trees and footbridge



Offsite Pond within adjacent woodland to the east