



**SHADOW STAGE 1 HABITATS REGULATIONS  
ASSESSMENT**

**Land at Bolton Fold Farm  
Preston Road  
Longridge  
Preston  
Lancashire**



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*A report for*

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January 2024

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## **PART 1: INTRODUCTION:**

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### **1.1 REASONS FOR STUDY:**

PENNINE *Ecological* have been commissioned by P. Wilson & Company on behalf of their client, to undertake a Shadow Stage 1 Habitats Regulations Assessment of proposals relating to land at Boltons Fold Farm, Preston Road, Longridge, Preston, Lancashire, PR3 3BN.

The study is required in association with a proposal to construct a new slurry store on the farm. (See Planning Ref. 3/2023/0632).

Pennine Ecological were commissioned following a consultation response from Natural England (NE) who raised concerns about the planning proposal's effect on the Bowland Fells Special Protection Area (SPA), and Red Scar and Tun Brook SSSI\*

\*See letter from Zoe Haystead Natural England Sustainable Development Lead Adviser – Wetlands, Water and Woodlands (Cheshire to Lancashire) to Will Hopcroft - Ribble Valley Borough Council, 29<sup>th</sup> December 2023 (NE Ref. 458294).

The summary of NE's advice is provided below. The letter is viewable in full on the Ribble Valley Borough Council planning portal.

Natural England advise further information is required to determine impacts on designated sites, including:

- A Habitats Regulations Assessment
- Resubmission of the SCAIL assessment
- Suitable bird survey evidence

The need for a HRA for the proposed development has been identified by Natural England as outlined above. Therefore, to assess the potential impacts of the development on the internationally designated sites, an initial HRA Screening Assessment (Stage One) is required.

This report fulfils the requirements of Article 63 of the Habitats Regulations and covers the first stage of the HRA process: Stage One (Screening). This will be used to establish whether or not a Stage Two (Appropriate Assessment) is required. Stage Two would only be required if there is likely to be, or uncertainty as to whether there will be, any significant effects on European or Ramsar sites.

In regard to this application NE have specified a HRA be undertaken in respect of the Bowland Fells SPA only.

Evaluation of impacts on Bowland Fells SSSI and Red Scar and Tun Brook Woods SSSI has also been requested.

The effect on the SSSIs is presented separately to the HRA but is contained within this report.

### **1.2 SITE LOCATION:**

The site is located on agricultural land north-west of Preston Road, Longridge, Preston PR3 3BN.

Central grid reference: SD 5966 3571.

The location of the proposal site is shown on Map 1 in the Appendix.

### **1.3 SURVEYOR EXPERIENCE:**

The evaluation and screening assessment has been completed by Ian Ryding an ecologist of over 36 years standing, who has observed and studied wintering and breeding bird assemblages on Lancashire farmland for over 25 years. On a non-professional basis, Ian has been watching birds, particularly wintering pink-footed geese and whooper swan in Lancashire for >40 years.

Projects include the following.

Five full wintering and breeding bird surveys, including Stage 1 HRA, associated with large scale development, including onshore wind and solar energy >90ha (approx.), large industrial 16ha (approx.) and large agricultural projects, 1.75ha (approx.).

Over 198 hours formal observation time has been accrued during these surveys.\*

\*Methodology - Recommended Bird Survey Methods to Inform Impact Assessment of Onshore Wind Farms, (Scottish Natural Heritage, 2014).

Natural England volunteer undertaking monthly WeBS counts on the Longton Marsh section of the Ribble Estuary for the last five years and ongoing at the present time.

Production of a comparative study of WeBS count data between years 2014 and 2019, where counts of individual wader/wildfowl species counted on the Longton/Hutton Marsh areas, were compared with counts covering the whole of the Ribble Estuary. The study was undertaken for Preston and District Wildfowlers Association and formed part of their objection to the route of proposed England Coast Path through the SPA/Ramsar/SSSI.

This study is cited as a reference (no.8) in *Assessment of England Coast Path proposals between Cleveleys, Lancashire and Pier Head, Liverpool on Sefton Coast Special Area of Conservation (SAC), Ribble and Alt Estuaries Special Protection Area (SPA) and Ramsar site, Liverpool Bay SPA and Mersey Narrows, and North Wirral Foreshore SPA and Ramsar site.* (Natural England 2020)

Part of the cannon netting and ringing team for Project Penelope in 2022, an international project aiming to track the Eurasian wigeon, run in collaboration with Wildfowl and Wetlands Trust, BASC Science and Preston & District Wildfowlers on the Ribble Estuary. The project is ongoing for the next four years.

Other key skills include the following.

- Extended Phase 1 Habitat Survey/Preliminary Ecological Appraisal and National Vegetation Classification Survey.
- Highly proficient field botanist, including some difficult plant groups.
- Mammal surveys including surveys for badger, water vole, otter, brown hare and preliminary bat roost assessment.
- Breeding bird survey including large-scale upland bird surveys associated with prospective wind energy sites in the Pennines.
- Expert witness delivering proof of evidence in respect of nesting birds at public inquiry in 2018 and 2020.

- Extensive experience in great crested newt (GCN) survey, evaluation, licensing and mitigation. Natural England Class Licence WML-CL08 held.
- Ecological Evaluation and Impact Assessments in association with large scale commercial development and civil engineering.

#### **1.4 SURVEY CONSTRAINTS:**

There were no significant constraints to this evaluation.

## **PART 2 EVALUATION AND OVERVIEW OF KEY FEATURES:**

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### **2.1 EXECUTIVE SUMMARY:**

- The site has no statutory or non-statutory wildlife or ecological designations.
- NE have identified statutory sites where impacts might potentially be generated by the proposal, triggering the need for a Stage 1 HRA.
- The proposal site is 50m x 50m in extent and is located in an arable field approximately 8.7km from the Bowland Fells SPA/SSSI.
- This evaluation has shown that the proposal site has no specific qualities that would attract or sustain any of the qualifying birds associated with the SPA, and by virtue of the habitats present, and land use, cannot reasonably be termed functional in respect of hen harrier, merlin or lesser black-backed gull.
- The habitats of the site are replicated many times locally and within a huge tract of lowland farmland between the Bowland Fells and the Lancashire coast, and any use of the site by the qualifying species is considered to be at best random, transitory and unlikely to form part of any habitual association with the site.
- The LERN data returned no records of the qualifying species on the site or within 2km, except for a single record of lesser black-backed gull at Alston Reservoirs.
- The proposal will generate no loss of functionally linked land (FLL) and will not directly or indirectly impact on any SPA or FLL either during the construction or operational phases.
- The Stage 1 HRA screening confirms no likely adverse effect, either alone or in combination with any other project, therefore an Appropriate Assessment or any other measures in respect of the qualifying birds of the SPA are not required.
- The desk-based evaluation shows that the proposal site is 8.7km and 1.6km from the Bowland Fells SSSI and Red Scar & Tun Brook Woods respectively.
- There are no direct or indirect impacts on the SSSIs generated by the proposal.

### **2.2 DESK BASED STUDY:**

The Multi Agency Geographical Information Centre [www.magic.gov.uk](http://www.magic.gov.uk) was referred to in respect of statutory sites.

Natural England's Access to Evidence website was also referenced in respect of the statutory sites and their qualifying features.

Lancashire Environmental Records Network (LERN) were consulted for protected species records within a 2km radius of the site.

Lancashire and Cheshire Fauna Society (LCFS) were not consulted as LCFS are a data partner with LERN and the data would be duplicated.

No other local sources of data are known for this area of the county that are not data partners with LERN.



The results of the desk study revealed the following information;

- The Bowland Fells SPA and SSSI is located 8.7km north of the site at its nearest point.
- Red Scar and Tun Brook Woods SSSI is located 1.65km south of the site at its nearest point.

Qualifying species of the Special Protection Area is (SPA) are as follows.

**Bowland Fells:**

Hen harrier	<i>Circus cyaneus</i>	(Breeding)
Merlin	<i>Falco columbarius</i>	(Breeding)

Proposed New Interest:

Lesser black-backed gull *Larus fuscus* (Breeding)

As a proposed feature of the Bowland Fells SPA which has been considered at the public consultation stages as a proposed feature, lesser black-backed gull must be treated as a feature within the SPA process.

**LERN Records:**

The LERN data provided the following information in respect of the qualifying species of the SPA.

A single record of lesser black-backed gull from Alston Reservoir No.1. The record is from 1991 and its location is 1.3km north-east of the site.

No records of the other two qualifying species, hen harrier or merlin were generated by the search.

**2.3 SITE DESCRIPTION:**

**2.3.1 General Description:**

The site of the proposed development is composed of an arable field of approx. 8.8ha that at the time of survey was under a maize crop. The maize crop is a seasonal feature and will change according to the crop rotation applied.

The site measures 50m x 50m and is accessible from an established metalled track and road linking to Preston Road.

The land surrounding the field containing the proposed development include ley grasslands, improved grassland and localised arable cropping with maize being grown as a fodder crop. A playing field is also present.

Dairy farming appears to be the predominant agricultural activity locally.

The field affected is relatively large and is approximately 8.8ha in extent.

The local fields generally have boundaries of flail cut defunct hedgerows with post and wire stock fencing.

A new housing estate is located approximately 160m east of the proposal site.

Several well-used\* public rights of way (PROW) surround the field containing the proposal site, which provide public links between residential areas to the north-east and Preston Road to the south.

\*(I Ryding pers. obs.)

The type of habitats on site and in the surrounding farmland are replicated very extensively across lowland Lancashire.

Photographs showing the general nature of the site are provided below.

**Site Photographs:**



**Photograph 1: Site of the proposed new slurry lagoon described in Target Note 1. Looking south-west from the access track.**



**Photograph 2: Typical view of the field affected by the proposal - looking south from the metalled track.**



**Photograph 3: Field immediately north of the site (ley grassland) - looking north from the metalled track.**



**Photograph 4: Field immediately north of the proposal site (ley grassland) - looking south-west across the field boundary.**



**Photograph 5: Field immediately north-east of the site (ley grassland) - looking north from the metalled track.**

### 2.3.2 Site Suitability for the Qualifying Features of the SPA:

#### Hen Harrier:

No definitive count figures are available in relation to Hen Harrier on the SPA, however, NE state that there were 18 nests on the Bowland Fells in 2022.\*

\*<https://naturalengland.blog.gov.uk/2022/08/26/more-than-100-hen-harriers-fledge-in-england-for-the-first-time-in-over-100-years/>

In addition, the atlas of breeding birds in Lancashire and North Merseyside\*\* estimated 10 individuals were present in 1999 during their three-year study period between 1997-1999, all of which were in the Bowland fells.

\*\*Pyefinch, R. & Golborn, P. (2001) *Atlas of the Breeding Birds of Lancashire and North Merseyside 1997-2000*. Lancashire Bird Club/Lancashire and Cheshire Fauna Society.

Hen harriers typically winter in very small numbers along the coast around saltmarshes, farmland and a small number of lowland heath sites.

The habitats on and surrounding the proposal site contain no specific qualities associated with breeding or foraging hen harrier and are composed of improved/arable/ley habitats typical of lowland farms across the county.

These habitats are replicated throughout the lowland zone of the county, none of which host hen harrier as breeding species.

Reference to standard guidance† indicates that hen harriers have a core range of 2km, with maximum range of 10km from the nest site whilst foraging from the nest.

†See Scottish Natural Heritage. (2016) *Guidance: Assessing Connectivity with Special Protection Areas*. SNH.

The preferred (habitat) state during the breeding season is *frequent patches of tall heather or young forestry (nesting, roosting), plus grasslands, bracken or low trees/scrub (feeding)*.††

*An abundance of live mammals and birds*†† is required throughout the year.

††Kirby. J et al (2000) *Key Habitat Attributes for Birds and Bird Assemblages in England*. English Nature Research Report no. 359.

Given that the greatest concentration of quarry will be within the Bowland fells, it is predicted that areas of general farmland will only be visited by hen harrier very occasionally, and where that is the case it will be in close proximity to the SPA, not dairy/arable land at distance from that site.

In regard to wintering, the agriculturally modified habitats of the site are highly unlikely to attract hen harrier due to a general low abundance of prey items, and any use by the species will at best be transitory, i.e. flying over.

It is considered highly unlikely that hen harrier would use such a site or be dependent on it, and as such there is no reasonable possibility of the proposal site or the surrounding land being functionally linked to the SPA in respect of this species.

The LERN data returned no records of hen harrier within 2km of the proposal site.

The loss of a 50m x 50m area of arable land will have no measurable effect on the species.



### **Merlin:**

The population of merlin breeding in the Bowland Fells SPA is not known, however, the atlas of breeding birds in Lancashire and north Merseyside estimated 25 pairs individuals were present in 1998 during their three-year study period.

Reference to the SNH guidance† indicates that merlin forage within 5km of the nest site, and foraging will be concentrated where the highest level of prey species will occur, which is predicted to be within the Bowland fells.

†See Scottish Natural Heritage (2016).

The preferred (habitat) state during the breeding season is *medium to tall ground vegetation predominant, plus small clusters of scattered trees (nesting)*.††

*An abundance of live birds and day-flying moths*†† is required throughout the year.

††Kirby et al.

The habitats on and surrounding the proposal site contain no specific qualities associated with breeding or foraging merlin and are composed of improved/arable/ley habitats typical of lowland farms across the county.

These habitats are replicated throughout the lowland zone of the county, none of which host merlin as a breeding species.

In regard to wintering, merlin typically winter in very small numbers along the coast particularly around saltmarshes, and coastal farmland, and the agriculturally modified habitats of the site are highly unlikely to specifically attract merlin due to a general lack of prey items, and any use by the species will at best be transitory, i.e. flying over.

It is considered highly unlikely that merlin would reside on a site such as that affected by the proposals or be dependent on it, and as such there is no reasonable possibility of the proposal site or surrounding fields site being functionally linked to the SPA in respect of this species.

The LERN data returned no records of merlin within 2km of the proposal site.

The loss of a 50m x 50m area of arable land will have no measurable effect on the species.

### **Lesser Black-backed Gull:**

Lesser black-backed gull (LBBG) breed in colonies that are concentrated on the Mallowdale and Tarnbrook Fell area of the SPA, where the bulk of the Lancashire population breed. The rest of the population breed on coastal sites, in particular the Ribble marshes and very locally elsewhere.

The survey of the population in 2018 reported 11349 pairs and the current Bowland population is now estimated to be 13000 pairs and is the largest colony in England.

LBBG forage at sea and around the coastal zone as well as on farmland and large inland waterbodies.

The preferred (habitat) state during the breeding season is *Predominantly medium to tall swards (colonial nesting)*.††

††Kirby et al.

*An abundance of fish mammals, birds, ground-surface and aquatic invertebrates and offal†† is required throughout the year.*

††Kirby et al.

The LERN data returned a single record (1991) of LBBG only, this was from Alston Reservoir No. 1 which is 1.3km north-east of the site. It's presence there is unremarkable and whilst the species sometimes forages on farmland, there are no particular features of the proposal site that would specifically attract this species over and above any other similar fields that are replicated over a vast area of lowland Lancashire, and as a consequence the proposal site has no reasonable functional link to the SPA.

Any potential link between the habitats on-site and LBBG is considered to be tenuous, and the loss of a 50m x 50m area of arable land will have no measurable effect on the species or indirectly on the SPA.

### **2.3.3 Bird Survey:**

Following the site evaluation and reference to the SPA/SSSI citations and the LERN data, a decision whether or not to undertake bird surveys on the site was considered.

In this instance it was decided that a bird survey either, breeding, passage or wintering would be unlikely to reveal any information in respect of the qualifying species other than species absent.

The following points are relevant that that respect.

- The area of development is very small 50m x 50m (2500m<sup>2</sup>).
- The land on site is highly improved and productive arable land managed under a modern cropping regime.
- The adjacent fields are agriculturally improved/ley dairy fields where multi crops of silage/haylage are taken for forage.
- The field containing the site and neighbouring fields have well used PROWs.
- The hedgerows locally are typically short, flail cut and defunct i.e. gappy and not stockproof.
- These habitats are replicated many thousands of times in the agricultural tract of land between the Bowland/Pennine edge and the coastal plain.
- The level of agricultural improvement isn't conducive to the qualifying species as potential prey will be naturally restricted.
- There is a profound absence of LERN (qualifying) species data associated with the site, with only LBBG recorded within a 2km radius.
- If the slurry lagoon was built it wouldn't significantly alter how the birds might use the area, as the feature is small and located in the corner of an 8.8ha field 8.7km from the SPA.
- If a bird survey was undertaken then the likelihood of the qualifying species being recorded on the site is considered to be remote due to the lack of supporting habitat, and the

extremely large amount of land with the same habitat characteristics that is replicated between the Bowland/Pennine fringe and the coastal zone.

- Based on the objective information and analysis provided above, it is considered that there is no realistic association between the qualifying birds of the SPA and the proposal site, and any occurrence of those species would be random and at best highly infrequent.
- Based on the above it is considered that any survey would only serve to prove 'absence', and that given the overall objective evaluation, 'absence' can be reasonably predicted and a bird survey is not required.



**Figure 1: Aerial plan showing the site in context with the surrounding habitats showing no specific association with habitats associated with the qualifying species of the SPA.**

#### **2.3.4 Air Quality:**

Following the submission of the SCAIL assessment, PWC Surveyors provided the following consultation advice received from NE in respect of air quality which stated the following.

*In order to assist your authority in screening for the likelihood of significant effects within the HRA, in relation to air quality impacts, based on the detail in the SCAIL provided, it is Natural England's advice that the proposal is unlikely to have a significant effect on any European site, arising from air quality, and can therefore be screened out from any requirement for further air quality assessment. It is recommended that the following information is used to record your conclusions with regard to the likelihood of significant effects:*

- *Screening has indicated that the process contribution (PC) for all pollutants at all sites will be <1% of the relevant critical level or load for the most sensitive habitat at each site (including nationally designated sites)*

Therefore following NE's advice the proposal can be screened out from any requirement for further air quality assessment.



## **PART 3: HABITATS REGULATIONS ASSESSMENT SCREENING**

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### **3.1 HABITATS REGULATIONS ASSESSMENT (HRA) SCREENING:**

#### **3.1.1 Summary**

The Habitats Regulations translated the European Union Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (the 'Habitats Directive') into UK legislation to protect sites that are internationally important for threatened habitats and species, and to create a legal framework for species requiring strict protection.

The Habitats Regulations require that an Appropriate Assessment (AA) be undertaken by a Competent Authority where any plan or project not directly connected with or necessary to the management of a European Site (i.e., a Special Area of Conservation (SAC) or Special Protection Area (SPA), or candidate or potential SAC/ SPA), is likely to have a significant effect either individually or in combination with other plans or projects. Whilst not a European Site designation, wetland sites designated under the Convention on Wetlands of International Importance, known as Ramsar sites, are also relevant as they are afforded the same level of protection as European Sites under domestic policy and treated in the same way.

HRA is the process, which includes an AA, whereby a Competent Authority comes to a conclusion as to whether there is no adverse effect on site integrity from a plan or project in view of the site's conservation objectives.

#### **3.1.2 Stages of HRA**

The four stages of the HRA process are as follows:

- Stage One – Screening (should be undertaken in all cases).
- Stage Two – Appropriate Assessment.
- Stage Three – Alternative Solutions.
- Stage Four – Imperative Reasons of Overriding Public Importance (IROPI) and including, in certain circumstances, compensatory measures.

It should be noted that not all stages may be necessary in the HRA process. If the screening stage determines that a plan or project is unlikely to have significant effects on a European Site (or Ramsar sites), subsequent stages are not required.

#### **3.1.3 Purpose of this Report**

The need for a HRA for the proposed development has been identified by Natural England.

Therefore, to assess the potential impacts of the development on the internationally designated sites an initial HRA Screening Assessment (Stage One) has been undertaken.

This report fulfils the requirements of Article 63 of the Habitats Regulations and covers the first stage of the HRA process: Stage One (Screening). This will be used to establish whether a Stage Two (Appropriate Assessment) will be required. Stage Two will only be required if there is likely to be, or uncertainty as to whether there will be, any significant effects on European or Ramsar sites.

## **3.2 HRA STAGE 1 (SCREENING)**

### **3.2.1 HRA Screening Method:**

The Stage 1 screening has been undertaken by an appropriately experienced and skilled ecologist with many years' experience observing and evaluating breeding and wintering birds in the farmed environment.

Guidance dictates that all internationally designated sites which have the potential to be affected by a plan or project should be considered as part of the HRA process.

The HRA process uses the source-pathway-receptor model to determine whether potential effects are anticipated and considers the following:

- Potential for effects pathways between the site(s) and the proposed development taking into account potential impacts of the proposed development.
- The ecological characteristics of the qualifying interest(s) for the designated site(s), taking into consideration the sites' conservation objectives; and
- Potential for in-combination effects with other plans and projects.
- The purpose of this section is to identify the relevant European sites and interest features that could potentially be affected by the proposed development, and those sites which can be 'screened out' of the HRA because there is no potential connectivity or no realistic pathway for a likely significant effect (LSE) on qualifying interests to occur.

The following international sites were identified for assessment.

- Bowland Fells SPA (approximately 8.7km north of the proposed development).

The Bowland Fells SPA is also designated on a national level as Site of Special Scientific Interest (SSSI).

Following the end of the Brexit transition period, the sites of international nature conservation importance are now known as the **national site network** (previously Natura 2000 sites).

The national network sites include Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) and are of exceptional importance in relation to rare, endangered or vulnerable species and/or habitats.

**Table 1: HRA Screening Assessment:**

Statutory Site: (Receptor)	Source	Pathway	In-combination Effects	Likely Significant Adverse Effects
Bowland Fells SPA – 8.7km north of the site at its nearest point.	<b>Construction:</b> Loss of habitats.	Loss or adverse effects on land within the statutory site, or loss of functionally linked land (FLL).	<b>None.</b> The proposals in conjunction with any other development project will not generate or contribute to any loss of habitat within the statutory sites or in FLL.	<b>No likely adverse effect.</b> There is no encroachment on to the SPA, and the proposal site has no habitats specifically associated with the qualifying species of the SPA. It can be confirmed that the site is composed of one of several enclosed, agricultural fields associated with a dairy farm. There is nothing that might possibly link the site to the SPA and is not functional in respect of the qualifying species.
	<b>Construction:</b> Noise and visual disturbance.	Noise and visual disturbance to birds on the statutory site and/or FLL off-site.	<b>None.</b> The proposals in conjunction with any other development project will not generate or contribute to any noise or visual disturbance within the statutory sites or in FLL.	<b>No likely adverse effect.</b> Based on the habitat assessment, it can be confirmed that the site is entirely surrounded by substantial tract of agricultural land punctuated by farmsteads and developed/residential land. The land displays no specific qualities associated with the habitat requirements of hen harrier, merlin or LBBG and cannot reasonably be termed functional.  The site is 8.7km from the SPA and at substantial distance from any land that might be termed functional for hen harrier, merlin or LBBG, and no visual or measurable noise disturbance will be generated during construction.
	<b>Operation:</b> Noise and visual disturbance.	Noise and visual disturbance to birds on the statutory site and/or FLL off-site generated by use of the slurry lagoon.	<b>None.</b> The proposals in conjunction with any other development project will not generate or contribute to any noise or visual disturbance within the statutory sites or in FLL during the operational phase.	<b>No likely adverse effect.</b> Based on the habitat assessment, it can be confirmed that the site is entirely surrounded by a substantial tract of agricultural land punctuated by farmsteads and developed/residential land. The land displays no specific qualities associated with the habitat requirements of hen harrier, merlin or LBBG and cannot reasonably be termed functional. In addition the operational use of the site will remain within the typical noise/activity range of a modern dairy farm, and the provision of a new slurry store in such an isolated location at distance from any SPA or potential FLL will not generate adverse impacts on the qualifying species whilst foraging or on passage.
	<b>Operation:</b> Atmospheric pollution from slurry.	Atmospheric pollution generated by the operation of the slurry lagoon	<b>None.</b> The proposals in conjunction with any other development project will not generate or contribute to any noise or visual disturbance within the statutory sites during the operational phase.	<b>No likely adverse effect.</b> Screening has indicated that the process contribution (PC) for all pollutants at all sites will be <1% of the relevant critical level or load for the most sensitive habitat at each site (including nationally designated sites)

### **3.2.2 Conclusions:**

The site evaluation has clearly shown that the proposal site and surrounding land forms part of large area of farmland typical of the lowland landscape between the inbye land of the western edge of the Bowland/Pennine hills, and the Lancashire coastal plain.

The habitat affected is a 50m x 50m plot on an arable field that is surrounded by leys and improved grasslands that are bounded by short flail cut hedgerows. A playing field and housing estate is also present in near vicinity.

There is estimated to be over 57.5 thousand hectares of comparable farmland within the geographical area described above, and there are no particular on-site features to indicate that the proposal site has any specific value over and above any other area of agricultural land for the qualifying species hen harrier, merlin and LBBG.

Consequently it is impossible to determine any possible functional link between the proposal site and the qualifying species.

Undertaking a bird survey of the site would be highly unlikely to show anything in respect of the qualifying features other than their 'absence', which this evaluation reasonably predicts.

Also the SPA is 8.7km from the proposal site and there will be no direct physical impact on that site.

In addition, screening has indicated that the process contribution (PC) for all pollutants at all sites will be <1% of the relevant critical level or load for the most sensitive habitat at each site (including nationally designated sites), and Natural England has advised that that the proposal is unlikely to have a significant effect on any European site, arising from air quality,

To summarise, the Stage 1 HRA screening confirms that no direct/indirect impacts will be generated by the proposals on the SPA during construction or operational phases, either alone or in combination with any other development.

Therefore an Appropriate Assessment or any other measures in respect of the SPA or its qualifying species are not required.

No further actions are recommended.

## **PART 4: ASSESSMENT OF THE EFFECTS ON THE SSSIs:**

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### **4.1 ASSESSMENT OF THE EFFECTS ON THE SSSIs:**

NE have requested information to determine if there will be any effect on the Bowland Fells SSSI and Red Scar & Tun Brook Woods SSSI.

Each of the sites has been evaluated individually below.

#### **Bowland Fells SSSI:**

The site is designated primarily on account of its habitats and plant communities, along with its breeding bird assemblages.

The SSSI is located 8.7km from the proposal site.

There is no physical encroachment on the SSSI arising from the proposals and no direct disturbance issues relating to nesting birds.

Some of the birds associated with the SSSI are common and widespread in the county, others are more specialised and linked to specific upland habitat types whilst breeding.

The HRA Stage 1 has determined no direct/indirect impacts on the SPA or its qualifying birds hen harrier, merlin and LBBG.

The proposal site is 50m x 50m in extent and is located on the corner of an arable field that is approximately 8.8ha.

There is no measurable predicted indirect impact on the SSSI, and it is impossible to link any individual common birds that might use the area with those on the SSSI, other than that they might happen to be the same species.

The loss of such a small area of land 8.7km from the SSSI is predicted to have 'no effect'.

#### **Red Scar & Tun Brook Woods SSSI:**

The site is designated primarily on account of its woodland habitats and plant communities.

Faunal species mentioned in the citation include hawfinch *Coccothraustes coccothraustes*, white letter hairstreak butterfly *Satyrus w-album* and oak bush-cricket *Meconema thalassinum*

The SSSI is located 1.65km south of the site at its nearest point and there is no known hydrological link between the proposal site and the SSSI. In addition NE have stated that *Screening has indicated that the process contribution (PC) for all pollutants at all sites will be <1% of the relevant critical level or load for the most sensitive habitat at each site (including nationally designated sites)*

Therefore, there are no perceived pollution issues associated with the proposal.

At 1.65km there is considered to no significant change in the noise audible from the SSSI during construction or operation. The operational noise spectrum is comparable to that generated by typical farming regime currently in place.

There is no physical encroachment on the SSSI arising from the proposals and no direct disturbance issues relating to nesting birds due to the distance between the proposal site and the SSSI.

The cited bird, hawfinch, is strongly associated with mature broad-leaved and mixed woodland that contains stone/seed bearing species such as yew, beech and cherry etc. The proposal site contains none of the habitat features associated with hawfinch, with the site being contained in an arable field with a short, defunct and fragmented flail cut hedge on one of its boundaries, which will be retained.

'No effect' on hawfinch is predicted during the construction or operational phases of the proposed development.

White letter-hairstreak is solely reliant on elm as its food plant, therefore the species has no association with arable fields and elm spp. are absent in the adjacent hedgerow, therefore 'no effect' on this species is predicted.

Oak bush-cricket is an arboreal species, and whilst it can occur in hedgerows the poor fragments and isolated example present close to the proposal site is considered highly unlikely to support such a specialised species with a very restricted distribution in the north of England.

The proposal site is entirely arable has no value for such species.

'No effect' on oak bush-cricket is predicted as a result of construction or operation of the proposed slurry lagoon.

## REFERENCES:

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- Scottish Natural Heritage. (2016) *Guidance: Assessing Connectivity with Special Protection Areas*. SNH.
- Scottish Natural Heritage (2014) *Recommended Bird Survey Methods to Inform Impact Assessment of Onshore Wind Farms*, (Scottish Natural Heritage).
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**APPENDIX:**

*Site Plan  
Site Location Plan*



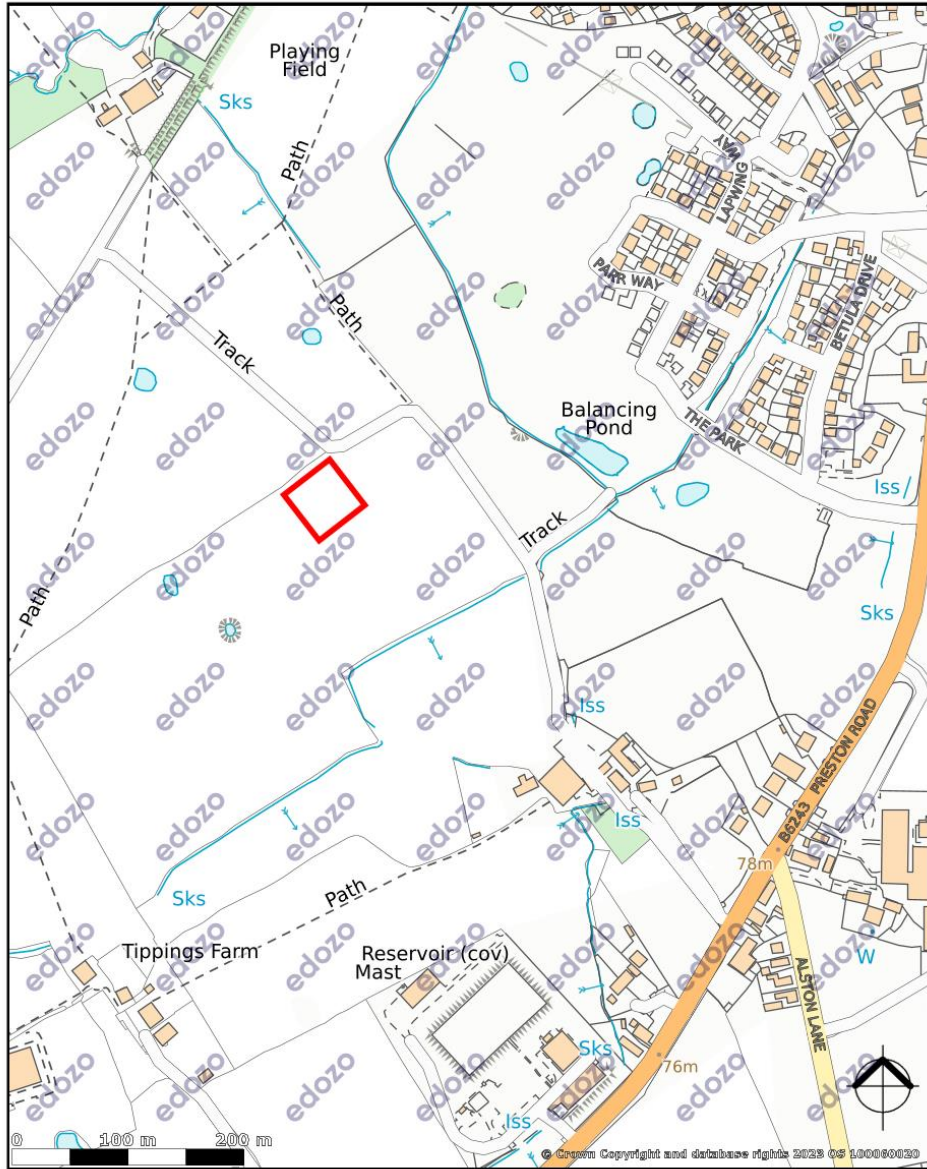
Site Plan - Bolton Fold Farm, Alston Lane, Alston, Preston, PR3 3BN



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Plotted Scale - 1:1,250

Site Plan - Bolton Fold Farm, Alston Lane, Alston, Preston, PR3 3BN



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Plotted Scale - 1:5,000