



PRELIMINARY ECOLOGICAL APPRAISAL

**LAND AT BRANDRETH FARM
TARLSCOUGH LANE
BURSCOUGH
LANCASHIRE**

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A report for

Acland Bracewell Surveyors Limited

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Map 1: Phase 1 Habitat Survey Map

Brandreth Farm - LERN Protected Species Search Plan (No SWA overlay)

Brandreth Farm - LERN Protected Species Search Plan (Showing all SWA overlays)

Brandreth Farm - LERN Protected Species Search Plan (Showing Whooper swan SWA overlay)

Brandreth Farm - LERN Protected Species Search Plan (Showing Pink-footed goose SWA overlay)

PART 1: INTRODUCTION:

1.1 REASONS FOR SURVEY:

PENNINE *Ecological* have been commissioned by Acland Bracewell Surveyors Limited, to undertake a Preliminary Ecological Appraisal (PEA) of land at Brandreth Farm, Tarlscough Lane, Burscough, Lancashire, L40 0RJ.

The study is required in association with a proposal to construct a new lean-to on a new building where prior approval has been obtained (see 2020/0255/PNP), and the formation of a new yard area on the site.

The study includes the following elements:

- Extended Phase 1 Habitat Survey.
- Evaluation of the potential effects on Great Crested Newt (GCN).
- Badger Survey.
- Breeding and Wintering Bird Evaluation.

The study also includes a full evaluation of the ecological significance of the survey and recommendations/precautions where appropriate.

The surveys were undertaken by Ian Ryding a surveyor with over 33 years experience in a wide range of ecological survey and assessment methodologies.

1.2 SITE LOCATION:

The site is located at Brandreth Farm, Tarlscough Lane, Burscough, Lancashire, L40 0RJ.

Central grid reference SD 4367 1390.

The location of the study area is shown on Map 1 in the Appendix.

1.3 SURVEY METHODOLOGY:

The methodologies where specific surveys were applied are outlined below.

1.3.1 Phase 1 Habitat Survey:

A Phase 1 Habitat Survey (*Nature Conservancy Council 1990*) of the survey area was undertaken on the 9th September 2020. The site's habitats were fully mapped and higher vascular plant species (where present) were recorded and given abundance values according to the standard DAFOR scale where:

D = Dominant
A = Abundant
F = Frequent
O = Occasional
R = Rare

Where appropriate the above values can be prefixed by the letter L (locally) or V (very), to provide more subtle biogeographical data.

1.3.2 Great Crested Newt Evaluation:

The site was evaluated by means of desk study, Habitat Suitability Index Survey, and the surveyor's specialist knowledge of the species, in particular its terrestrial habits and breeding requirements.

1.3.4 Wintering Bird Evaluation:

Wintering birds were evaluated by means of desk study and the surveyor's specialist knowledge of the species that winter in the area, including their habits and feeding requirements, particularly pink-footed goose and whooper swan.

1.3.5 Other Species:

During the survey, observations relating to the potential presence of badger and breeding birds were also undertaken.

1.3.6 Surveyor Experience:

The surveyor and author of this report, Ian Ryding, has over 33 years experience in ecological survey and evaluation. 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 survey.

*Over 250km of river reaches surveyed in England.

- Breeding and wintering bird survey.
- 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.
- Proof of evidence in respect of nesting birds at public inquiry 2018 and 2020.

1.4 SURVEY CONSTRAINTS:

The surveys were undertaken during the appropriate season or could be reasonably evaluated and there were no constraints to survey.

PART 2 SURVEY RESULTS:

2.1 EXECUTIVE SUMMARY:

- The site has no statutory or non-statutory designations.
- There is one statutory site (Martin Mere SSSI/SPA/Ramsar) approximately 1km from the site at its nearest point. In addition, the Ribble & Alt Estuary (SSSI/SPA/Ramsar) is located approximately 9km from the site.
- The site is within 1.6km of Windmill Fields Biological Heritage Site. BHS Ref. 41NWW2, and there are three other BHSs >1.6km of the site.
- The area affected by the proposal is composed of hardstanding, bare ground and arable land used for growing cereal crops and vegetables.
- The habitats affected by the proposal are of 'site' value only.
- The hedgerows is the only S41* habitat on the site and will be retained.
- There is one off-site pond abutting the site, but no others within 250m of the site. The pond is a purpose-built irrigation lagoon of recent origin, and the possibility of GCN presence is considered to be remote.
- The LERN data returned no records of GCN records within 2km of the site.
- There is a modern steel portal agricultural building next to the site that is unaffected by the proposals and has 'negligible' bat roost potential.
- There are no trees on or adjacent to the site, and the low roadside hedgerow has 'negligible' bat roost potential.
- The land affected is arable and hardstanding and bat foraging/commuting areas are limited to the roadside hedgerow which has 'negligible-low' value.
- 'Negligible' impacts on bats are predicted.
- Nesting bird habitat on the site is 'negligible-low' and nesting bird interest cannot exceed 'local' i.e. Parish value.
- The site is within the Sensitive Waterbird Area (SWA) for pink-footed goose, and whooper swan.
- The site itself has 'negligible' foraging value for wintering pink-footed goose and whooper swan, and given the scale and location of the development impacts on wintering birds are not predicted to exceed 'negligible' magnitude.

*Section 41 – Habitats and Species of Principle Importance in England (NERC Act 2006).

- The LERN data returned numerous records of pink-footed goose or whooper swan within 2km of the site.
- The survey revealed no evidence of use of the site by badger and there are no LERN records within 1km of the site.

2.2 DESK BASED STUDY:

A request was made to Lancashire Environmental Record Network (LERN) in September 2020 to obtain details of any non-statutory sites (BHS/LWS) or biological records within 2km of the site.

The Multi Agency Geographical Information Centre www.magic.gov.uk was referred to in respect of statutory sites.

Table 1: Desk Study Data:	
Statutory Sites:	
On site:	Off site:
None.	Martin Mere and the Ribble and Alt Estuary SSSI/SPA/Ramsar sites are located approximately 1km and 9km from the site respectively. Mere Sands Wood Geological SSSI is located 1.9km north (approx.) of the site.
Non-Statutory Sites:	
On site:	Off site:
None	Within 250m: None. Within 500m: None. Between 500m-1km: None. Between 1km-2km: Windmill Fields, Windmill farm Drain, Mere Sands Wood and Burscough NW Curve.
Other Site Designations:	
On site:	Off site:
The site forms part of the Sensitive Waterbird Area (SWA) for pink-footed goose and whooper swan.	The land surrounding the site forms part of the Sensitive Waterbird Area (SWA) for pink-footed goose and whooper swan.
Protected Species:	
On site:	Off site:
None.	Within 250m: house martin (2020), Starling (2020). Between 250m-500m: Common pipistrelle (Road survey 2006). Tree sparrow (2020), Pink-footed goose (2018). Whooper swan (2020) Brown hare (2020). Lapwing (2011, 2018, 2020). Shelduck (2020), Yellow wagtail (2025). Corn bunting (2015) Grey partridge (2014). House sparrow (2020). Between 500m-2km: The data contained a large amount of records within this zone that cannot be reasonably reproduced here. These species are not specifically related to the site and are considered to be beyond the sphere of influence of the proposal. However, the large number of Pink-footed goose and Whooper swan records in the data is acknowledged
Other Species:	
On site:	Off site:
None.	Within 250m: None. Beyond 250m the species are well beyond the sphere of influence of the proposal, therefore they are not reproduced here

2.3 PHASE 1 HABITAT SURVEY:

2.3.1 General Description:

The site of the proposed development is composed of a mixture of hardstanding, and small areas of arable land and bare ground on the edge of existing farm buildings.

A roadside hedgerow forms part of the northern boundary, and the farmstead with yards, ancillary buildings and irrigation lagoon to the west.

The land to the south and east is arable land.

The surrounding land is predominantly arable and used for growing of vegetable and cereal crops.

2.3.2 Phase 1 Habitat Survey Target Notes:

Survey locations, Target Notes and the proposed working area locations are shown on Map 1 in the Appendix. Note: All species nomenclature follows Stace, C. (1996) 'New Flora of the British Isles' - definitive English names.

Target Note 1:

A small area of disturbed ground that includes an area of compact earth used by farm vehicles, and a stand of tall ruderal herb dominated by great willowherb, with frequent common orache and creeping thistle, and occasional common ragwort.

Target Note 2:

A short, flail-cut roadside hedge.

The hedge is an obvious planting as it is composed of even-aged hawthorn only.

There is a rank ground flora typically dominated by false oat-grass and cock's-foot with abundant field horsetail, common nettle and hedge bindweed, locally abundant dove's-foot crane's-bill, frequent herb Robert, and occasional common ragwort.

Target Note 3:

A small area of arable land next to the farm buildings.

Target Note 4:

An area of cleared ground south of the existing farm buildings.

Photographs showing the general conditions on site are provided below.

Site Photographs - Habitats:



Photograph 1: The machinery storage area on compact bare ground, and roadside hedge described in Target Notes 1 and 2 respectively.



Photograph 2: The machinery storage area and stand of tall ruderal herb described in Target Notes 1.



Photograph 3: The arable land east of the farm buildings described in Target Note 3 - looking north-east.



Photograph 4: The cleared land south of the farm buildings described in Target Note 4 – looking north.

2.4 GREAT CRESTED NEWT EVALUATION:

There are no ponds on site and the only waterbody present within 250m is a large purpose-built irrigation lagoon that abuts part of the proposal site.

Reference to Ordnance Survey (OS) data and aerial images show that historically there was a relatively low density of ponds in the surrounding landscape, which is probably on account of the local geology, with marl being absent or very localised.

All ponds shown on the first edition OS maps of the area, had either been infilled/drained by the mid-1960s or were over 500m from the site.

As a consequence of the lack of ponds locally for many years, by the time the irrigation lagoon was constructed in 1997, any former GCN population that might have been present in the area historically, will have died out.

In addition, the lagoon has been stocked with a range of fish, firstly triploid (infertile) trout, followed by carp and a general range of coarse fish.

Therefore, based on the long-term absence of ponds in the landscape with potential 'progenitor' GCN populations, and the existing conditions within the lagoon generated the large predatory fish populations, the lagoon is considered to have 'negligible' value to GCN, and the possibility of GCN presence is considered to be remote.

The LERN data search returned no records of GCN within 2km.

2.5 PRELIMINARY BAT ROOST EVALUATION:

The preliminary bat roost survey was undertaken on the 9th September 2020 following the methodology outlined in *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn)* Collins, J. Bat Conservation Trust (2016)

There are no trees on the site, and none of the adjacent farm buildings will be affected by the proposal.

However, the nearest building was subject to an external inspection which identified the following.

- The building is a large steel portal frame agricultural barn used to store produce.
- The building is typically clad in plastisol-coated box-profile sheeting on the walls and roof.
- There are matching verge and ridge cappings, with box-profile gutters and no fascias.
- Profile fillers are fitted throughout.
- The barn has metal roller shutter doors that are kept closed at night.

Based on the above it can be concluded that bats are unable to land on the wall surfaces due to the plastisol coating, and that all profile gaps are filled preventing access into the building.

There is no other means of bat access into the building.

Roost potential in the building is therefore 'negligible'.

Whilst trees are absent, there is a short flail-cut hedgerow forming the northern site boundary. The hedge is low in height, <1.5m, and has no holes and fissures suitable for roosting bats, and roost potential is 'negligible'.

It is understood that the hedgerow will be retained.

2.6 BIRDS:

2.6.1 Breeding Birds:

The area of land affected by the proposals is mainly composed of compact bare ground, with smaller areas of hardstanding and a small marginal area of arable land.

There is a low flail-cut hedgerow on the northern boundary.

With the exception of the hedgerow, the land affected by the proposals has 'negligible' nesting bird value. This is on account of the lack of woody vegetation, and in the case of ground-nesting species, the land affected is very close to overbearing boundary features that include the hedgerow, the building, and the trees/shrubs on the bank of the nearby lagoon, which provide cover and perches for predators such as corvids.

The crop types associated with the site also have a bearing on the value of the site for ground-nesting birds. Crops such as winter cereals restrict nesting to the early spring period only, as the crop has grown too high by mid-season and skylark and lapwing will no longer attempt to nest in the crop due to its advanced growth.*

In addition, the land is used in rotation for vegetable growing which also requires relatively intensive management. Both the level of management and crop type are not conducive to ground-nesting birds.

*RSPB et al.

In regard to the hedgerow, its low height and shape formed by seasonal flail-cutting, reduces its value for nesting birds significantly. The presence of a busy rural road also potentially generates an increase in bird fatalities, due to vehicle strikes.

Overall the hedgerow is only capable of supporting very low numbers of common songbirds not exceeding 'local' i.e. Parish interest.

2.6.2 Wintering Birds:

The site is located on the edge of the farmstead directly adjacent to agricultural buildings, and yards/storage areas that are in regular use.

A small area of arable land will be affected, and again this is located next to agricultural buildings and abuts Tarlscough Lane.

The proposal is also next to an area where prior approval for an agricultural building extension and apron has been granted.

Reference to LERN data confirms that the proposal site and surrounding area forms part of the Sensitive Waterbird Areas (SWA) for both pink-footed goose (PFG) and whooper swan.

This includes the main feeding area for PFG.

*The Sensitive Waterbird Area is defined based on tetrad counts over the period winter 2008/09 to winter 2017/18**

*The Sensitive Waterbird Area includes all tetrads with a greatest regular use class of at least '1% Lancashire & North Merseyside Population', plus any adjacent tetrads that are regularly flown over by Geese and Swans.**

*See LERN Sensitive Waterbird Area v3a 22/11/2018

As the boundary of the SWA is defined on a tetrad (2x2km squares) basis it will also contain land that is not regularly utilised by PFG and whooper swan. Consequently, whilst the site sits within the SWA, this doesn't mean that all of the land within the SWA is used by wintering birds,

In this part of the county, the potential feeding areas locally are vast and extend from the coastal strip of Southport and Banks to the north-west, Croston to the north-east and as far as Simonswood and Knowsley on the county's southern border. A map showing the whole of the current SWA wasn't available to inform this study, however, a rough estimate of the former SBA in West Lancashire alone (based on RSPB data) is estimated to be in excess of 17,000ha. With the total SBA within West Lancashire and north Merseyside in excess of 20,000ha.

The SBA for whooper swan is also vast but less extensive, with feeding concentrated in areas close to their roosts at Martin Mere and the Ribble Estuary, and the estimated size of the former SBA in Lancashire and north Merseyside is approximately 10,000ha**

**A map showing the whole of the current SWA in West Lancashire wasn't available to inform this study, therefore RSPB data was referred to in respect of the extent of the wintering area including feeding and fly over zones.

Areas of land used or avoided by PFG is influenced by certain factors that include the following.

- Field size.
- Contiguity of suitable habitat.
- Crop type.

- Presence of boundary features.
- Levels of human disturbance.
- Crop protection/deterrents.
- Topography.

The same influencing factors also apply to whooper swan, however, this species appears to be more tolerant of the presence of boundary features than PFG.

The site is small and approximately 0.276ha in extent, with none of the areas affected used by wintering PFG and whooper swan due to the constraining boundary features (see below), and the limited area of land in arable use which is 0.1ha approx.

On its west side, the proposal site is located directly adjacent to the embanked lagoon, farm buildings and yards/services areas at Brandreth Farm. While on the north side, the site directly abuts Tarlscough Lane where there is a footway with pedestrian activity adjacent to the site boundary.

A well-used public right of way (PROW) comes off Tarlscough Lane and runs in a southerly direction along the western side of the lagoon towards Crabtree Lane.

On arable farmland, wintering PFG prefer to feed in open expansive areas and naturally avoid feeding in areas near to buildings, especially where pedestrian activity is present.

Where hedgerows and buildings occur, PFG 'stand-off' from these features due to a perceived threat of predators that might be present and hidden from view. *

Such stand-off zones are increased significantly where there is regular pedestrian activity.

*It should be noted that wintering PFG can be observed close to boundaries and in relatively close proximity to human activity at Marshside, Southport. However, this is atypical behaviour where the birds have adapted to utilising protected sites, this activity is **not** typical of working agricultural land.

The owner has confirmed use of the adjacent field (8.1ha) by PFG and whooper swan which is also confirmed by the ecologist (pers. obs.), as well as the adjoining fields to the south (75ha), and land north of Tarlscough Lane (>500ha).

The habitats here are open/expansive and largely without significant tree/hedgerow cover and potentially fulfil the general foraging requirements of PFG and whooper swan. The extensive tract of arable land north of Tarlscough Lane that includes Tarlscough and Burscough Mosses, also provides the same function, and attracts large numbers wintering PFG and whooper swan and is consequently one of the core feeding areas locally.

Further consideration is given to the presence of Martin Mere an important roost site for PFG and whooper swan, which is located 1km (approx.) west of the site. Where such sites occur in relatively close proximity to potentially suitable foraging habitat, there is a reasonable likelihood that PFG would use those foraging areas.

In addition, the Ribble & Alt Estuary, another important roost and wintering site for PFG and whooper swan is located on the nearby coastal fringe 9km (approx.) north of the site. Martin Mere and the Ribble & Alt Estuaries are SSSI/SPA and Ramsar sites on account of their wintering wildfowl populations, and PFG is a notifiable feature in respect of these statutory sites.

These sites are also listed as a Natura 2000 Sites.

An evaluation of the potential effects of the proposal on the statutory sites is provided below.

2.6.3 Evaluation of the Effect of the Development on Wintering Birds of the SSSI:

The initial evaluation uses the LERN and Magic data which revealed the following information.
(See below)

- Martin Mere (SSSI/SPA/Ramsar) is located approximately 1km north of the site at its nearest point.
- Ribble & Alt Estuary (SPA/SSSI) is located approximately 9km north of the site at its nearest point.
- The SSSI/SPAs are also Ramsar sites and Natura 2000 sites on account of their wintering wildfowl populations.
- The proposal site is identified as a major feeding area for PFG, and is close to the main roost area, as defined by the Sensitive Waterbird Area (SWA).
- The site lies within the SWA for whooper swan.

Given the important statutory status of the SSSI/SPA as cited above, Natural England's SSSI Impact Risk Zones (IRZ) Guidance was also consulted in relation to this project.

The SSSI IRZs can be used by Local Planning Authorities, developers and consultants in relation to planning applications, '*The Impact Risk Zones (IRZs) are a GIS tool developed by Natural England to make a rapid initial assessment of the potential risks to SSSIs posed by development proposals. They define zones around each SSSI which reflect the particular sensitivities of the features for which it is notified and indicate the types of development proposal which could potentially have adverse impacts. The IRZs also cover the interest features and sensitivities of European sites, which are underpinned by the SSSI designation and "Compensation Sites", which have been secured as compensation for impacts on Natura 2000/Ramsar sites.*'*

*SSSI Impact Risk User Guidance - see www.magic.gov.uk

The list of development categories and associated potential risks are as follows.

GUIDANCE – How to use the Impact Risk Zones

1. DOES PLANNING PROPOSAL FALL INTO ONE OR MORE OF THE CATEGORIES BELOW?

2. IF YES, CHECK THE CORRESPONDING DESCRIPTION(S) BELOW. THE LPA SHOULD CONSULT NATURAL ENGLAND ON LIKELY RISKS FROM THE FOLLOWING:

All Planning Applications:

All planning applications (except householder) outside or extending outside existing settlements/urban areas affecting greenspace, farmland, semi-natural habitats or landscape features such as trees, hedges, streams, rural buildings/structures.

Infrastructure:

Pipelines, pylons and overhead cables. Any transport proposal including road, rail and by water (excluding routine maintenance). Airports, helipads and other aviation proposals.

Wind & Solar Energy:

Solar schemes with footprint > 0.5Ha, all wind turbines.

Minerals, Gas & Oil:

Planning applications for quarries, including new proposals, Review of Minerals Permissions (ROMP), extensions, variations to conditions etc. Oil & gas exploration/extraction.

Rural Non Residential:

Large non-residential developments outside existing settlements/urban areas where net additional gross internal floorspace is > 1,000m² or footprint exceeds 0.2ha.

Residential:

Residential development of 10 units or more.

Rural Residential:

Any residential developments outside of existing settlements/urban areas with a total net gain in residential units.

Air Pollution:

Any industrial/agricultural development that could cause AIR POLLUTION (incl: industrial processes, pig & poultry units with floorspace >500m², slurry lagoons >200m², & manure stores >250t)

Combustion:

General combustion processes >20MW energy output. Including energy from waste incineration, other incineration, landfill gas generation plant, pyrolysis/gasification, anaerobic digestion, sewage treatment works, other incineration/combustion.

Waste:

Landfill including inert landfill, non-hazardous landfill, hazardous landfill.

Composting

Any composting proposal with more than 500 tonnes maximum annual operational throughput, Incl: open windrow composting, in-vessel composting, anaerobic digestion, other waste management.

Discharges

Any discharges of water or liquid waste that is more than 2m³/day to ground (i.e. to seep away) or to surface water, such as a beck or stream. (NB This does not include discharges to mains sewer which are unlikely to pose a risk at this location).

Water Supply

Large infrastructure such as warehousing/industry where net additional gross floorspace is >1000m² or any development needing its own water supply.

Conclusions:

Using the above guidance, the initial evaluation considers the proposal to be outside existing settlements/urban areas affecting greenspace, farmland and semi-natural habitats only.

Consequently the site meets the 'All Planning Applications' criteria of the IRZ criteria as cited above.

In addition, as the proposed development's footprint is 0.276ha, it exceeds the 0.2ha threshold and also meets the 'Rural Non Residential' criteria of the IRZ criteria.

However, the provision of the new agricultural building in this area is not predicted to have any major adverse/measurable effect on the statutory sites or their notifiable features, and the following points are relevant in that respect.

- The site is located approximately 1km from Martin Mere and 9km from the Ribble & Alt Estuaries (SSSI/SPA/Ramsar).
- There is no direct physical impact on any of the statutory sites.
- The proposal site is located directly adjacent to the road with an associated footway, farm buildings and boundary hedgerow.
- The site is located in the SWA for wintering PFG and whooper swan. However, the foraging value of the proposal site is seriously compromised by its small size and its location abutting negative features, including the existing buildings, areas of regular farm activity, adjacent tree-line by the lagoon, and boundary hedgerows next to a road and footway.
- The presence of the PROW also adds a potential element of regular disturbance on the west and southern side of the proposal area.
- In agricultural areas, PFG, whilst accustomed to the presence of farm buildings in the landscape, and farm activity associated with those areas, naturally avoid foraging close to buildings, dense/tall woody vegetation and areas of regular human activity.
- Given the presence of these features directly adjacent to the proposal area, none of site has value to wintering birds which will naturally stand off from these areas while foraging.
- Acknowledging the feeding habits of PFG and whooper swan in relation to the prevailing negative features on and adjacent to the proposal site, the site is considered to have 'negligible' value for those birds due to a lack of foraging habitat.
- The loss of land in arable production 0.1ha (approx.) represents 1.23% of the adjacent field, and 0.13% of the arable land that is contiguous with it. The loss of foraging on this scale at the field edge are considered to generate a 'negligible' effect only.

- As the land affected is on the field edge and directly abutting the farm, there will be no impacts on PFG or whooper swan through direct loss of foraging on the proposal site, and any 'displacement effect' generated by the proposals is considered to be of 'negligible' magnitude, as the presence of the existing building, woody boundary vegetation, and the current level of farm activity in that area is well established.

In regard to construction methods and timing the following points apply.

- The owner is very keen to complete this project and has confirmed that construction will begin as soon as consent has been granted, with a projected completion date eight weeks after commencement. The works will run in conjunction with construction of the adjacent building and apron, where prior approval has been granted.
- The building will have standard steel portal frame foundations, with standard steel portal frame construction methods.
- No piling is required.
- Construction will be by machinery typically used on the farm only, including excavator, tractor and trailer, roller, telehandler and skid steer, etc.
- The limited scale of the building means that there is no requirement for a crane or any machinery that would impact on the flight-line of any wintering birds, and no specialist machinery required that would be likely to materially alter the general agricultural noise spectrum of the farmed landscape.
- The projected construction period will be eight weeks.

Whilst the broad evaluation presented above predicts no measurable effect on the SSSI/SPA, and a 'negligible' effect on wintering/feeding wildfowl, the LPA might still consider consultation with Natural England appropriate.

2.7 EVALUATION OF OTHER FEATURES:

2.7.1 Badger:

The badger survey focused on land directly affected by the proposed development and land within 50m of the site where accessible.

The survey used standard techniques for establishing the use of the site by badger, and includes searches for evidence of badgers including:

- Setts
- Pathways
- Footprints
- Latrines
- Foraging areas
- Scratching posts

The survey results are outlined below.

Sett Search:

The survey found no setts on the site or on the surrounding land

Search for Foraging Signs:

The site was thoroughly searched for badger pathways or signs of foraging. No sign of badger foraging activity was found therefore it can be concluded that the species is not using this area for foraging.

Boundary Search:

The boundaries of the site were walked and examined for potential runs, pathways and latrines.

The search revealed an absence of any runs that might possibly be attributed to badger around any of the boundaries.

The search found no evidence of badger latrines on any boundaries, therefore the absence of latrines indicates a lack of territorial activity in the near vicinity of the site.

In addition, the LERN data returned two badger records (2006) >1km from the site.

Survey Conclusions:

The survey found no evidence of historic, recent or current use of the site by badgers for foraging, commuting or occupation, and the area directly affected by the proposals is unsuitable for badger habitation.

Based on the lack of badger signs, the species is considered to be absent on the site and locally.

PART 3 SUMMARY EVALUATION & RECOMMENDATIONS:

3.1 SUMMARY EVALUATION OF FINDINGS:

The following section discusses the significance of the survey findings. It should be noted that this part of the evaluation relates to habitats and species and includes reference to the following statutory/non-statutory instruments.

- The Wildlife and Countryside Act 1981 (and later amendments), with particular reference to protected species listed in Schedules 1, 5 and 8 of the above act.
- Conservation of Habitats and Species Regulations 2010.
- Section 41 Habitats and Species of Principal Importance in England. Natural Environment and Rural Communities (NERC) Act 2006.
- Reference to any relevant Red Data List/Book species and Nationally Scarce species not covered by the above or any other lists / schedules of species rarity or importance.
- Use of the *Biological Heritage Site Guidelines for Site Selection* (LCC, LWT 1998) has been made. This document is an invaluable tool for assessing the significance of species / habitats in Lancashire, since it sets out the minimum ecological requirements for species/habitats to be selected as a Biological Heritage Site. Biological Heritage Sites (BHS) are by definition considered to be of Lancashire County significance for their ecological interest. By implication, sites that fail to meet these guidelines would not be of County ecological significance, but may be of significance at a more local scale e.g. Borough / Parish etc. The use of this method of site evaluation is in effect application of the Ratcliffe (1977) Criteria at a more specific local County level.

The evaluation is based on the commissioned surveys and desk study only.

The following statements are relevant in respect of the above.

3.1.1 Statutory Sites:

The site has no statutory designation.

The site is located approximately 1km from Martin Mere and 9km from the Ribble & Alt Estuaries (SSSI/SPA/Ramsar). These sites are also Natura 2000 sites on account of their wintering wildfowl/wader populations.

The SSSI/SPA/Ramsar/Natura 2000 sites are of international importance.

There are no direct impacts on the statutory sites generated by the proposals, impacts on notifiable features are discussed in greater detail under Wintering Birds in Section 3.1.8 below.

3.1.2 Biological Heritage Sites:

The study area has no BHS designation and none of the habitats/species qualify for BHS status under the various guidelines for selection.

The nearest BHS is Windmill Farm Fields (41NWW2), which is located approximately 1.6km north-west of the site. There are three other BHSs between 1.6 and 2km of the site. There are no direct or indirect impacts on these sites.

3.1.3 Section 41 NERC Act 2006 Habitats & Species:

These are Species and Habitats of Principal Importance for the Conservation of Biodiversity in England under Section 41 (S41) of the Natural Environment and Rural Communities (NERC) Act 2006.

Hedgerows are S41 habitats, but those present are planted, of relatively 'recent' origin and lack both woody and floristic diversity.

There are no confirmed records of S41 species within the study area.

3.1.4 Nationally Scarce/County Red Data List Species:

There are no Nationally Scarce/County Red Data list plant species on the site.

In addition to the above, the field survey and evaluation of the site revealed the following information.

3.1.5 Vegetation/habitats:

The proposal will directly affect areas of bare/compact ground, tall ruderal herb, hardstanding and arable land, all are limited in extent at 0.276ha.

The boundary hedgerow will be retained and fails to meet the qualifying criteria for Important Hedgerows by a wide margin.

Collectively the habitats affected are of 'site' ecological value, with impacts not extending beyond the land directly affected by the proposals.

3.1.6 Great Crested Newt:

The GCN evaluation revealed that there are no ponds on site and the only waterbody present within 250m is a large irrigation lagoon that abuts part of the proposal site boundary.

A search of Ordnance Survey (OS) data and aerial images show that historically there was a relatively low density of ponds in the surrounding landscape, and that all ponds shown on the first edition OS maps of the area, had either been infilled/drained by the mid-1960s or were over 500m from the site.

As a consequence of the lack of ponds locally for many years, by the time the irrigation lagoon was constructed in 1997, any former GCN population that might have been present in the area historically, will have died out.

In addition, the lagoon has been stocked with a range of fish, including trout, followed by carp and a general range of coarse fish.

Therefore, based on the long-term absence of ponds in the landscape, and the existing conditions within the lagoon generated the large predatory fish populations, the lagoon is considered to have 'negligible' value to GCN, and the possibility of GCN presence is considered to be remote.

The LERN data search returned no records of GCN within 2km.

3.1.7 Bats:

The survey conclusively shows that there are no trees or shrubs on the site with roost potential above 'negligible'.

The adjacent agricultural barn will be retained and also has 'negligible' bat roost potential.

In addition, the site is located in an open and expansive tract of arable/horticultural land, and good foraging areas are absent on site.

The only areas that bats might potentially use for foraging/commuting are the adjacent lagoon and boundary hedgerow, both of which will be retained.

3.1.8 Birds:

Breeding Birds:

The area of land affected by the proposal includes areas used for farm machinery storage, with arable land used for the cultivation of cereal and vegetables crops.

A short hedgerow forms the northern boundary.

Overall, given the habitats present, and agricultural regimes applied to the site, the site is not capable of supporting bird populations exceeding 'local' (i.e. Parish) value.

Wintering Birds:

The site is located in SWA for both PGF and whooper swan.

The site of the proposed new building and hardstanding is directly adjacent to the existing farmstead, areas that wintering birds naturally avoid whilst foraging, these include the buildings, boundary hedgerow and footway, and the lagoon embankment and associated planted trees and shrubs.

PGF and whooper swans naturally stand-off from these areas due to a perceived threat of hidden predators and/or impeded vision across the wider landscape, and also to avoid any threat generated by human presence.

Due to the proximity of the statutory sites at Martin Mere and the Ribble and Alt Estuary, the site meets the 'All Planning Applications' criteria of the IRZ.

In addition, as the proposed development's footprint is 0.276ha, it exceeds the 0.2ha threshold and also meets the 'Rural Non Residential' criteria of the IRZ.

The loss of land in arable production is 0.1ha (approx.), and represents 1.23% of the adjacent field, and 0.13% of the arable land that is contiguous with it. Loss of foraging on this scale at the field-edge and adjacent to negative features is considered to be 'negligible', as this is an area that will be avoided by wintering birds.

The provision of buildings on the site infill a gap that abuts agricultural barns on its north side, and the lagoon on its west side, which will screen the new building along those elevations.

The south and east side will be unscreened but wintering geese/swans will already stand-off from the existing farmstead, therefore infilling the land as proposed is not considered to generate any measurable adverse effect on wintering birds, with birds predicted to continue

using the adjacent field (8.1ha), as well as the adjoining fields to the south (75ha) that are contiguous with it, for foraging as they are known to do at present.

Construction will take place at the same time as the adjacent agricultural building extension and apron, where prior approval has been granted, using machinery in common use on the farm only. No cranes or piling will be required.

Therefore it is reasonable to conclude that there will be no direct impact on the statutory sites, and that measurable impacts on PFG and whooper swan are 'negligible'.

In this instance given the location and scale of the proposals, wintering bird surveys in respect of PFG and whooper swan are not considered appropriate.

3.1.9 Badger:

The proposal site is unsuitable for badger habitation and no evidence of badger activity wasn't found in the wider site area during the survey, therefore the species is absent within the sphere of influence of the proposal.

3.2 RECOMMENDATIONS:

The following section outlines any mitigation or precautions required in respect of the survey findings.

3.2.1 Vegetation/Habitats:

The site of the proposed development is composed of a small area of arable land, and compact bare ground on the edge of existing farm buildings.

A roadside hedgerow forms part of the northern boundary.

The habitats are of 'site' value only.

No significant habitats are affected by the proposals and no further surveys or provisions are recommended.

3.2.2 Great Crested Newt:

Based on the long-term absence of ponds in the landscape, and the existing conditions within the lagoon generated the large predatory fish populations, the lagoon is considered to have 'negligible' value to GCN, and the possibility of GCN presence is considered to be remote.

No further surveys or precautions in respect of GCN are recommended.

3.2.4 Bats:

The survey has shown that there are no features with bat roost potential above 'negligible' value on or adjacent to the site, and that foraging potential is 'negligible-low'.

No further surveys in respect of bats are recommended.

It is not envisaged that the areas of the new building will require lighting on the elevations nearest to the lagoon, but to maintain any functionality of potential foraging/commuting routes, it is advised that light spillage in that area is avoided.

3.2.5 Breeding Birds:

It is understood that roadside hedge on the northern site boundary will be retained.

In addition, the proposed works will affect areas of land where ground-nesting birds can reliably be predicted to be absent.

Therefore provision and/or precautions for nesting birds are not required.

3.2.6 Wintering Birds:

In this instance given the location and scale of the proposals, wintering bird surveys in respect of PFG and whooper swan are not considered appropriate.

However, as the area affected by the proposals lies adjacent to areas used for foraging by PFG and whooper swan, the following points are relevant.

- The construction phase should be as short as possible and run in conjunction with, or following on from the consented building extension and apron.
- Standard construction methods should be applied.
- Piling or the use of cranes must not be employed.
- Machinery used should be that typically used on a modern arable farm.

3.2.7 Badger:

Badger are absent on site and locally and no further surveys or precautions recommended.

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APPENDIX:

Map 1: Phase 1 Habitat Survey Map

Brandreth Farm - LERN Protected Species Search Plan

(No Sensitive Waterbird Area overlay)

Brandreth Farm - LERN Protected Species Search Plan

(Showing all Sensitive Waterbird Area overlay)

Brandreth Farm - LERN Protected Species Search Plan

(Showing Whooper swan Sensitive Waterbird Area overlay)

Brandreth Farm - LERN Protected Species Search Plan

(Showing Pink-footed goose Sensitive Waterbird Area overlay)

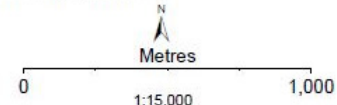
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Project:
Land at Brandreth Farm Tarlscough Lane
Client:
Pennine Ecological Preston
Grid Ref: 343670 413900

Legend

- 250 m Buffer
- 500 m Buffer
- 1 km Buffer
- 2 km Buffer
- ⚡ Lancashire Key Species
- ▲ Bat Roost or Possible Roost
- ▽ Other Bat Record
- SLBG Other Bat Record
- ▲ Lancashire INNS
- Biological Heritage Sites
- Natura 2000
- SSSI
- Pink-footed Goose Main Roost
- Pink-footed Goose Major Feeding Area
- Pink-footed Goose Regular Flyover Area
- Whooper Swan SWA

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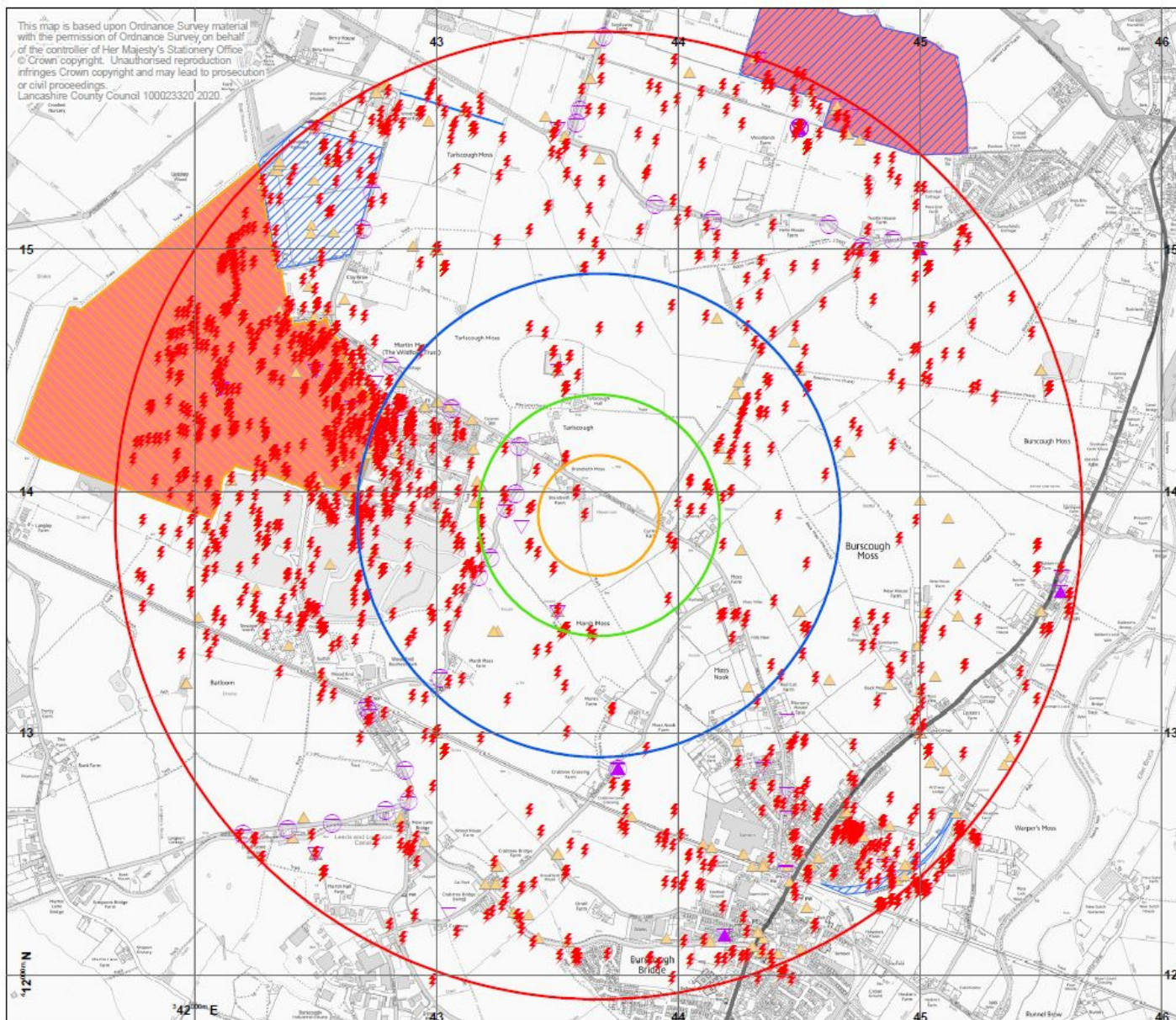
Lancashire Key Species records are plotted at the centre of the area to which they relate (the precision of each record is given in the accompanying attribute data and spreadsheet).

NEN Atlas occurrence download at <https://hbnatlas.org> accessed on Fri Oct 20 12:44:41 UTC 2017. See supporting documentation for citations and further information.

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lern@lancashire.gov.uk <http://www.lancashire.gov.uk/lem.aspx>



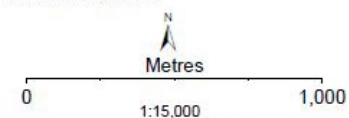
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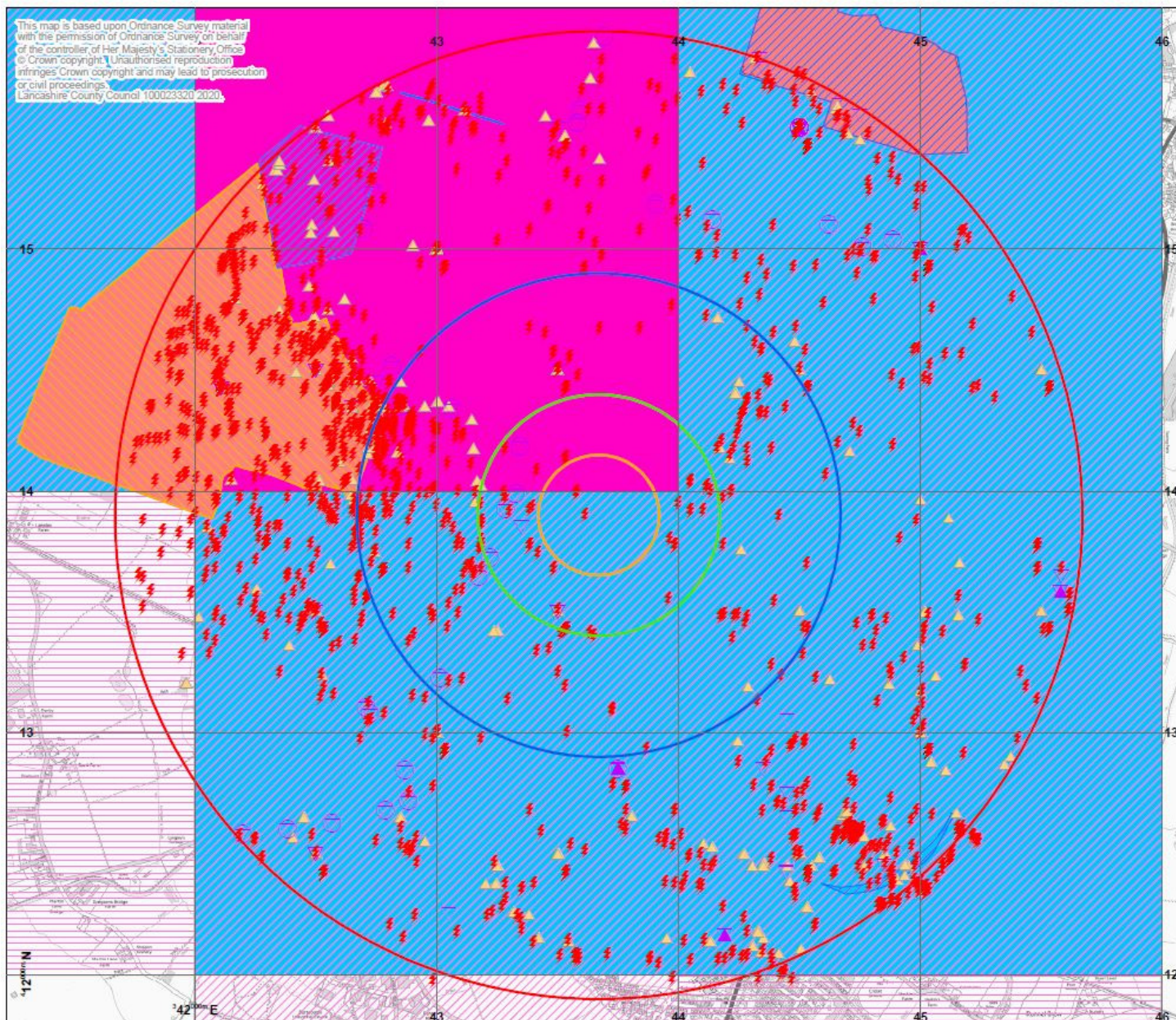
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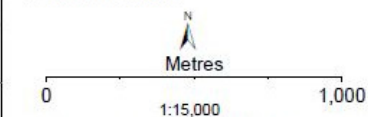
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