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22 June 2017

Job ref: B 1818

Dear Richard

Re: European Protected Species: Barn at Witton's Farm, Anna Lane, Bolton-by-Bowland, Clitheroe.

You have requested a protected species survey on behalf of your client Steve Flanagan as a condition of a planning application to Ribble Valley Borough Council (RVBC) for building alterations at the above property.

The Local Planning Authority is required to take account of the impact of a development on protected species in accordance with current planning policy (National Planning Policy Framework). RVBC requires an appraisal of the likely impact of the proposed development on bats and other protected species that are present or likely to be present at the site, in addition to any mitigation and enhancement works that may be necessary.

As a consequence of the historical declines in bat populations during the second half of the twentieth century, all bats and their roosts are protected by UK law. The depletion of natural habitats throughout the UK means that some bat species are now more than ever dependent on houses and other structures as roosting sites. It is this dependence that makes them vulnerable to redevelopments that can result in damage or destruction of a roost, particularly maternity roosts, resulting in negative impacts on a local bat population.

The survey has found only minor evidence of bat activity bats at this property.

The overall conservation significance of building is relatively low and therefore the impact of the proposed building alterations is unlikely to cause significant disturbance to protected species (bats and wild birds) or result in the loss of a significant bat roost or nesting place for barn owls.

The proposed building operation are unlikely to result in a breach of the Habitats Regulations, therefore the works should proceed without a requirement to obtain a mitigation licence (EPSL) or require further surveys.

Please find a copy of the report now attached.

Yours sincerely

David Fisher
Director (EED Surveys)

European Protected Species – BAT SURVEY REPORT

Barn at Witton's Farm, Bolton-by-Bowland

Date of survey: 12/05/17

Introduction

Since 2008 bats have been included in the list of UK Biodiversity Indicators which aim to show the response of species to the pressures, changes and threats to our natural and built environment. The Local Planning Authority is required to take account of the impact of a development on protected species in accordance with current planning policy (National Planning Policy Framework).

A preliminary roost assessment of the stone barn and a number of out-buildings at Witton's Farm was carried out on 18 January 2012 by David Fisher (EED Surveys – Job No: B1077). The initial survey found the building to be low risk in terms of likely disturbance to protected species.

The 2012 report considered the stone barn and out-buildings as low potential structures for roosting bats and found no evidence of roosting or nesting barn owls. Consequently the report concluded that, *“the scale of the impact of the proposed development at site level on local bat populations is likely to be negligible or low”* and therefore *“unlikely to result in the loss or destruction of a bat roost.”*

A dusk emergence survey has now been undertaken at the request of Ribble Valley Borough Council. The survey has confirmed that the stone barn and out-buildings continue to have relatively low conservation significance and has noted that the physical condition of the main roof of the barn has deteriorated significantly since the scoping visit in 2012 rendering the building even less attractive to roosting bats.

The recent survey has also confirmed that nesting and roosting barn owls are not present within these buildings although roosting / nesting jackdaws were noted in the east gable end of the stone barn.

The dusk survey recorded only brief echolocation / foraging activity by a solitary long-eared bat inside the barn; there was no evidence of any regular or significant roosting activity by bats at the site.

Timing of survey / weather conditions

The dusk (evening) emergence survey was carried out on Monday 12 June 2017 between 20.30 and 23.00.

The weather at the time of the survey was mild, dry and bright (min. temperature: 16°C, cloud: 80%, wind: light WNW breeze F2/3, rain: nil) providing satisfactory conditions for this level of survey.

Personnel

The inspection was carried out by David Fisher (EED Surveys) - an ecological consultant with extensive field survey experience of European Protected Species and development issues for 30 years.

The surveyor has held a Natural England licence since 1989 and continues to work as a voluntary bat worker via the Bat Conservation Trust / Natural England.

Current licences held:

Natural England Class Licence WML - A34 - Level 1 (Registration Number: 2015 – 17599-CLS-CLS)

Natural England Class Licence WML - A34 – Level 2 (Registration Number: 2015 – 12106-CLS-CLS)

Aims of the survey*

Collect robust data to provide an assessment of the potential impacts of the proposed development on bat populations and other protected species at the property.

Facilitate the design of mitigation, enhancement and monitoring strategies for bats and all protected species.

Provide a clear assessment of risk to bats and other protected species enabling the Local Planning Authority to reach an informed planning decision.

Assist clients in meeting their statutory obligations.

Facilitate the conservation of bat populations and other protected species.

*Adapted from 'Defining aims and objectives', p15 BCT Bat Surveys - Good Practice Guidelines,

Survey methodology

The survey methodology is designed to determine the likely presence of bats within the property and does not necessarily prove absence.

The survey protocol requires that a full visual inspection of the property is carried out. The survey aims to cover all internal and external features of the building including any accessible roof voids and out-buildings that are likely to be affected by the proposed works.

The survey methodology follows the recommended guidelines published by the Bat Conservation Trust - *Bat Surveys: Good Practice Guidelines, 2nd Edition, Hundt, L (2012)*, Natural England (*Survey Objectives, Methods and Standards as outlined in the Bat Mitigation Guidelines, 2004*) and Chapter 3 - Survey and Monitoring Methods, (*Bat Worker's Manual, JNCC, Mitchell-Jones AJ and McLeish, AP, 3rd Edition 2004*).

The search was made using a high-powered lamp (*Clu-lite CB2 - 1,000,000 candle power*), close-focussing binoculars (*Leica Trinovid 10 x 32 BN*) and digital camera (*Sony Cyber-shot HX300*) were used to view all likely areas of the building for the presence of bats - ie. droppings and urine spots, bat corpses, bat fly larvae, roost staining or evidence of feeding remains such as discarded moth and butterfly wings or other insect fragments typically found in a perching and feeding area.

Evening bat activity was assessed using a Pettersson D230 ultrasonic bat detector with stereo headphones. Additional recordings were made using an Anabat SD2 device (Frequency Division) with an attached Hewlett Packard iPAQ PDA to view spectrograms of bat calls.

Additionally, a video recorder (SONY Cybershot HX300) with tripod and 4 No. infra-red lamps was used to record activity inside the stone barn.

Non-invasive survey methods were used to assess the use of the property by protected species.

Survey limitations

Crevice-roosting bat species are able to roost within very narrow gaps, frequently less than 20mm wide; solitary roosting bats are sometimes overlooked during daylight inspections, particularly in situations where bats have gained access within rubble infill walls or beneath roof materials and other structural features.

Evidence of bat activity such as bat droppings, feeding signs and other indicative evidence such as staining on external walls and surfaces is frequently removed by the action of wind and rain; as a cautionary principle it should be assumed that the absence of evidence of bats is not necessarily evidence that bats are not present.

National Biodiversity Network (NBN) and other data sources, whilst indicative of the bat species likely to occur within a 10km-grid square, do not confirm presence or absence of a species or habitat. Local bat records are compiled from a number of reliable sources but may also include unverified public data.

Pre-survey data search (Site location: NGR: SD 776 523)

The pre-survey data search includes the following sources:

- (1) European Protected Species (EPS) - ie. species records of local, regional or national significance.
- (2) National Biodiversity Network (NBN*) terrestrial mammal records (chiroptera).
- (3) Bat records from local sources include:
 - (i) North Yorkshire Bat Group
 - (ii) East Lancashire Bat Group
 - (iii) EED Surveys
 - (iv) other ecological consultants.
- (4) Interactive maps: *Natureonthemap* (Natural England) and *Magic.gov.uk*.

*National Biodiversity Network (NBN) and other data sources whilst indicative of the bat species likely to occur within a 10km-grid square, do not confirm presence or absence of a species or habitat.

The following bat species are likely to be present within the 10km national grid squares: SD 74 and SD75:

Common name	Scientific name	Local population status
<i>Myotis species</i>	(<i>Myotis sp.</i>)	
Natterer's bat	(<i>Myotis nattereri</i>)	widespread / common
Whiskered bat / Brandt's bat	(<i>M. mystacinus</i> / <i>M. brandtii</i>)	widespread / uncommon
Whiskered bat	(<i>M. mystacinus</i>)	widespread / uncommon
Brandt's bat	(<i>M. brandtii</i>)	widespread / uncommon
Daubenton's bat	(<i>M. daubentonii</i>)	widespread near open water
Brown long-eared bat	(<i>Plecotus auritus</i>)	widespread / locally
common		
<i>Pipistrelle species</i>	(<i>Pipistrellus sp.</i>)	widespread / common
Common pipistrelle	(<i>Pipistrellus pipistrellus</i>)	widespread / common
Soprano pipistrelle	(<i>P. pygmaeus</i>)	widespread / common
Noctule bat	(<i>Nyctalus noctula</i>)	widespread / locally
common		

Location of the property

(NGR: SD 776 523)

The property is located within the boundary of the Forest of Bowland AONB at an elevation of approximately 160 metres; the farm is surrounded by open countryside with extensive grazing land with an open aspect overlooking the valley at Skirden Beck to the east. The surrounding landscape is largely B4 improved grassland / B2.2 semi-improved neutral grassland - (Phase 1 habitat categories).

There are no extensive broadleaved woodlands adjacent to the site and the district is not particularly well-wooded although there are several deeply-wooded moorland cloughs within the area and there is riparian woodland habitat along the Skirden Beck approximately 0.6km east of the property. There is a small broadleaved woodland / plantation approximately 200 metres west of the farm on slightly lower ground.

The site is not adjacent to open standing water or any significant water channel. Grunsagill / Skirden Beck is the most important water course within the locality in terms of high-value feeding and foraging opportunities. Habitat connectivity between Witton's Farm and Skirden Beck is relatively low given the open aspect of the surrounding landscape (figure 4).

There are no designated nature conservation sites immediately adjacent to the property – ie. Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SACs), Special Protection Areas (SPAs), Biological Heritage Sites (BHS), National Nature Reserves (NNR's), Local Nature reserves (LNR's) or Regionally Important Geological and Geo-morphological Sites (RIGS).

Description of the property

Detached stone barn (figure 1) with random stone rubble-infill wall construction and duo-pitched stone slate roof. The barn has a traditional large wagon door with a loft area above the entrance; there is also a first floor workshop, a main hayloft and a number of small under-crofts.

There is a single storey lean-to shippon at the rear with mono-pitched box profile roof (figure 2).

The barn roof has a timber post and truss frame with 5 roof bays (figure 5); the stone slate roof is unlined and the barn is open to eaves. The roof is partly damaged (figure 3) allowing considerable ingress of water; approximately 10 – 15% of the roof and ridge board is very insecure.

The main loft area is also damaged by water; a small loft over the main wagon door entrance supports a large iron water tank; there is no safe access into this loft area.

Below the main loft is an under croft with 6 animal cubicles; the room is east-facing with only minimal natural light despite two small glazed windows. At the front of the barn, to the right of the wagon door are steps leading into a first floor workshop with an under croft below.

To the left of the wagon door are two small under-crofts with glazed windows.

Externally, the roof is clad with stone slates, stone ridge tiles and stone coping stones over the roof verges; two glass slip skylights on the south pitch of the roof provide some natural light within the building. The external stonework is mortar-pointed and relatively secure.

Images: 12/06/17



Figure 1: Stone barn at Witton's Farm (NE elevation)



Figure 2: rear and side elevation



Figure 3: SE gable end of barn showing roof damage



Figure 4: View east to Skirden Beck

Survey results

There is minor evidence of feeding and perching by solitary bats within the building; a small number of discarded insect wings (small tortoiseshell butterfly and herald moth) were present on floors of under-crofts, these findings are entirely consistent with the previous survey undertaken in January 2012.

There is no evidence of barn owl activity at the property.

Barn swallows were not present within the barn or out-buildings.

Jackdaws were roosting / nesting at the east gable end of the barn.

Dusk emergence survey results

The emergence survey began at sunset (21.35) and continued for 85 minutes after sunset.

Bat activity was minimal around these buildings; a small number of solitary common pipistrelle bats (*Pipistrellus pipistrellus*) were noted foraging over the site at least 45 minutes after sunset. No bats were seen entering or emerging from the barn or other buildings and swarming activity at the barn was not recorded.

A solitary long-eared bat (*Plecotus auritus*) was briefly recorded echolocating within the barn approximately one hour after sunset but was not observed in flight and it was not seen emerging from within the building or observed entering any part of the barn.

Evaluation of the results

A solitary long-eared bat inside the building approximately one hour after sunset is consistent with opportunistic feeding and foraging activity commonly observed in this species. The small quantity of discarded insect prey beneath feeding perches in the barn and crofts is consistent with sporadic / occasional feeding by solitary bats.

The location of Witton's Farm is sub-optimal in terms of connectivity and access to woodland habitat. Long-eared bats are relatively widespread and common within the wider district and throughout the Ribble Valley particularly where suitable feeding, foraging and commuting habitat is abundant.

There is no evidence of regular or significant feeding, perching or roosting by bats within the barn and hibernation in the building is unlikely.

The building has relatively low conservation significance; the scale of impact of the proposed works is also low.

Risk of disturbance to bats: **Low risk**

***Minimal:** it is highly unlikely any bat species have been active within any part of these structures.

***Low risk:** there is only low risk of disturbance to solitary bats or small numbers of common and widespread bat species.

Low / moderate risk: caution required; activity of common / rarer species is possible, including the presence of occasional / regular night perching and feeding activity or the presence of small numbers of rarer species (but not a maternity or hibernation site).

Moderate risk: caution required; there is moderate risk of disturbance to common bat species; activity may include the presence of regular / significant feeding perches and signs of feeding, a regularly used day / night roost or a maternity site of a common and widespread species or the likely presence of low numbers of rarer species ('rarer' as defined within the local context).

Moderate / high risk: considerable caution is required; this category may include a maternity site of rarer species.

High risk: considerable / extreme caution is required; there is a significant risk of causing disturbance to roosting bats at this site including large numbers of common species, a maternity site of locally rare or rarest UK species or a significant hibernation site for rare or rarest species; this is likely to be a site meeting the SSSI guidelines.

Table 2: *Based on Guidelines for proportionate mitigation - Bat Mitigation Guidelines (2004) fig. 4, page 39

Risk of disturbance to barn owls:

No risk - There is no risk of disturbing roosting / nesting barn owls at the property.

Mitigation / compensation requirement

The conservation significance of the stone barn and out-buildings is considered low.

The Bat Mitigation Guidelines (BMG) advise:

- (1) flexibility over provision of bat boxes and access by bats to new buildings
- (2) no specific conditions about timing of the works or post-development monitoring.

Summary and recommendations

The proposed development is **unlikely to cause significant disturbance to bats** or result in the loss of a bat roost or cause injury or death of a European Protected Species – (Bats) or result in any significant impact on a local bat population.

The scale of impact of the development at site level on local bat populations is likely to be **low**.

The proposed building alterations should proceed with reasonable caution and vigilance for the unexpected presence of solitary roosting bats (see Mitigation guidance – Annex 1)

The works should proceed **without a requirement to obtain a development licence (EPSL)** as the proposed development are unlikely to result in a breach of the Habitats Regulations.

Mitigation and compensation measures are required (see ANNEX 1 and 2 for details).

ANNEX 1

Mitigation guidance — minimising the risks to roosting bats and wild birds

Mitigation refers to the practices adopted to reduce or remove the risk of disturbance, injury or death of a protected species or damage to a roost. The Bat Mitigation Guidelines (Natural England, 2004) define mitigation as “...measures to protect the bat population from damaging activities and reduce or remove the impact of development”.

Action	Advice / comments
1. Further survey effort at this site	Not required
2. Detailed method statement	Not required
3. Licence requirement (EPSL)	Not required
4. Removal of roofing materials	General recommendation: In the unlikely event of any bats being exposed during the removal of the roof spars, roof slates, ridge slates and timber battens, operations in these areas should stop until the site has been fully inspected by a qualified person / ecologist. (For further advice - see note 7 below)
5. Accidental exposure of bats	Seek advice immediately. Cover any exposed bats to reduce any further risk of harm. Place the bats in a small dark and very secure box and leave in a cool and quiet place. Wherever possible, building / roofing contractors should try to prevent any bats from flying away in daylight. Call the surveyor for further advice before continuing work in this area, otherwise contact the Bat Conservation Trust's emergency help line.
6. Legal responsibility	The onus lies with the applicant to ensure that no offence will be committed if the development goes ahead, regardless of whether planning permission has been granted.
7. Emergency advice on bats	EED Surveys (David Fisher): 01200 425113 (office) or 07709 225783 (mobile) email: earthworksuk@yahoo.co.uk The Bat Conservation Trust (BCT) provides a bat helpline: 0345 1300 228; in an emergency, BCT will call the nearest volunteer bat worker in your area to arrange a free site visit. www.bats.org.uk email: enquiries@bats.org.uk
8. Nesting wild birds	All wild birds, their nests and eggs are protected by law; building operations should avoid disturbance to nesting birds during the summer breeding season.

ANNEX 2

Compensation measures

Compensation refers to works which offset the damage caused by the development (eg. by the creation of new roosts opportunities). The following bat-friendly adaptations are recommended:

PROVIDE 4 No. RIDGE ACCESS TILES ALONG THE ROOF RIDGE OF THE PROPOSED DEVELOPMENT.

The ridge tiles can be evenly spaced along the roof ridge. If a roof void is to be included within the final design. Long-eared bats and other species are attracted to the shelter provided by ridge tile cavities.

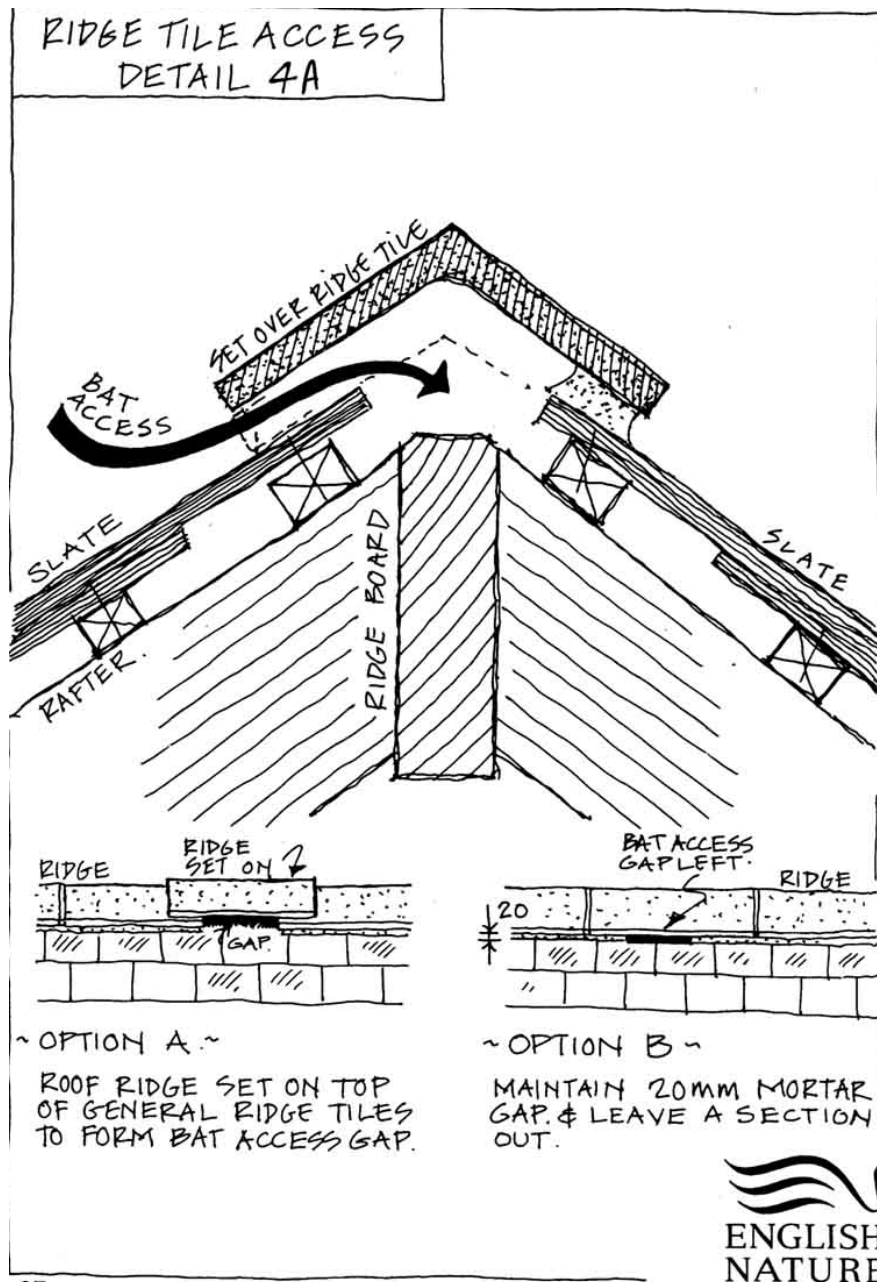
Two methods are recommended:

(1) either - providing very narrow gaps (20mm – 25mm wide) beneath raised roof tiles.

(2) or providing 20mm – 25mm access gaps under tiles to enable bats to enter the space under ridge tiles (see illustrations)

Pipistrelles and long-eared bats will enter roofs via narrow gaps under the ridge tiles; additional benefits are provided when small gaps are provided through the roofing felt or sarking membrane thus enabling bats to enter any retained roof voids (where this is appropriate to the design of the building).

NB. A range of commercially available products are easily available.



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The above information is for guidance only and may not be appropriate in all circumstances, if in doubt seek professional advice.
English Nature Cumbria Team, Juniper House, Murley Moss, Oxenholme Road, Kendal LA9 7RL. Tel: 01539 792800 Fax: 01539 792830 Email: cumbria@english-nature.org.uk

ANNEX 3 - Wildlife legislation – Bats and the law

All bat species in the UK receive full protection under the Wildlife and Countryside Act 1981 (amended by the Environment Protection Act 1990). The Countryside and Rights of Way Act 2000 amends the Wildlife and Countryside Act to also make it an offence to intentionally or recklessly damage, destroy or obstruct a place that bats use for shelter or protection. All species of bats are listed on Schedule 5 of the 1981 Act, which makes it an offence to:

- *intentionally kill, injure or take any wild bat.*
- *intentionally or recklessly damage, destroy or obstruct access to any place that a wild bat uses for shelter or protection. This is taken to mean all bat roosts whether bats are present or not.*
- *intentionally or recklessly disturb any wild bat while it is occupying a structure or place which it uses for shelter or protection.*

The protected status afforded to bats means planning authorities may require extra information (in the form of surveys, impact assessments and mitigation proposals) before determining planning applications for sites used by bats. Planning authorities may refuse planning permission solely on grounds of the predicted impact on protected species such as bats. Recent case law has underlined the importance of obtaining survey information prior to the determination of planning consent¹.

“It is essential that the presence or otherwise of protected species, and the extent that they may be affected by a development proposal, is established before the planning permission is granted, otherwise all relevant material considerations may not have been addressed in making the decision.”²

All British bat species are included in Schedule 2 of the Conservation (Natural Habitats, &c.) (Amendment) Regulations 2007, (also known as Habitats Regulations) which defines ‘European Protected Species’ (EPS).

¹ Bat Mitigation Guidelines, AJ Mitchell Jones, Joint Nature Conservation Committee, (2004) ISBN 1 86107 558 8

² Planning Policy Statement (PPS9) (2005), Biodiversity and Geological Conservation. ODPM.

Protected species (Bats) and the planning process

Our built environment has the potential to have major negative impacts on biodiversity. However, if done sensitively, the development and refurbishment of buildings can, in fact, increase the ecological value of the site.*

For development proposals requiring planning permission, the presence of bats, and therefore the need for a bat survey, is an important ‘material planning consideration’. Adequate surveys are therefore required to establish the presence or absence of bats, to enable a prediction of the likely impact of the proposed development on them and their breeding sites or resting places and, if necessary, to design mitigation and compensation. Similarly, adequate survey information must accompany an application for a Habitats Regulations licence (also known as a Mitigation Licence) required to ensure that a proposed development is able to proceed lawfully¹.

The term ‘development’ [used in these guidelines] includes all activities requiring consent under relevant planning legislation and / or demolition operations requiring building control approval under the Building Act 1984.

Natural England (Formerly English Nature) states that development in relation to bats “covers a wide range of operations that have the potential to impact negatively on bats and bat populations. Typical examples would be the construction, modification, restoration or conversion of buildings and structures, as well as infrastructure, landfill or mineral extraction projects and demolition operations”.²

* Designing for Biodiversity, RIBA (second Edition - 2013)

¹ Bat Surveys, Good Practice Guidelines, BCT (2007).

² Tony Mitchell-Jones, (BMG, 2004)

Natural England – North of England offices are located at:

Sheffield: Natural England, 1 East Parade, City Centre, S1 2ET, Sheffield.

Crewe: Natural England, Electra Way, Crewe business park, Crewe, Cheshire, CW1 6GJ 0300 060 2922

Kendal: Natural England, Juniper House, Murley Moss, Oxenholme Rd, Kendal, Cumbria, LA9 7RL 0300 060 2122

Manchester: Natural England, 3rd Floor, Bridgewater House, Whitworth Street, Manchester, M1 6LT 0300 060 1062

ANNEX 4

References

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