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10 FOLLONSBY TERRACE, WARDLEY, PROPOSED DEVELOPMENT BAT AND BARN OWL RISK ASSESSMENT– JANUARY 2016

SECTION 1 BACKGROUND AND SUPPORTING INFORMATION

A. Executive Summary

- 10 Follonsby Terrace is situated 500m to the east of Wardley, in South Tyneside. The building inspected is a two storey end terraced house and is constructed from brick with a pitched slate roof.
- The proposals are to demolish the conservatory on the east aspect of the building and to construct an additional adjoined terraced house on the east gable wall of the present building.
- The immediate area has some bat foraging potential nearby along plantation edges and shelterbelts, however these are close to busy trunk roads.
- The inspection did not reveal any traces of bats or good bat roost potential.
- There is minimal bat roost potential and a negligible risk that a bat maternity roost is present in the building affected by the proposals. No further surveys are recommended.
- The occasional bat may however be present in any suitable crevice at any time of the year in small numbers. Timing of any works to brickwork to avoid the hibernation period will ensure that the development has as little negative affect on bat conservation status as possible.
- All contractors involved in the development will read the method statement, prior to commencing the work.
- There were no traces of barn owls around the building. Any nesting birds will be allowed access to the nest until the young have fledged.

B. Introduction.

B1 Background.

10 Follonsby Terrace is situated 500m to the east of Wardley, in South Tyneside. The building inspected is a two storey end terraced house and is constructed from brick with a pitched slate roof.

B2 Proposed Works.

The proposals are to demolish the conservatory on the east aspect of the building and to construct an additional adjoined terraced house on the east gable wall of the present building. A garage will also be built to the south of the new build.

C. Survey and site assessment

C1 Pre-existing information on the species at the site.

There are no known pre-existing records of bats at the site.

C2 Status of species in the local/regional area.

Within 2 Km there are pre-existing records of foraging Pipistrelle 45kHz and the occasional Brown Long-eared bat roost 100m to the northeast (2005). Foraging Pipistrelle 45kHz bats are also known 3km to the southeast. (Own Records 1986-2015).

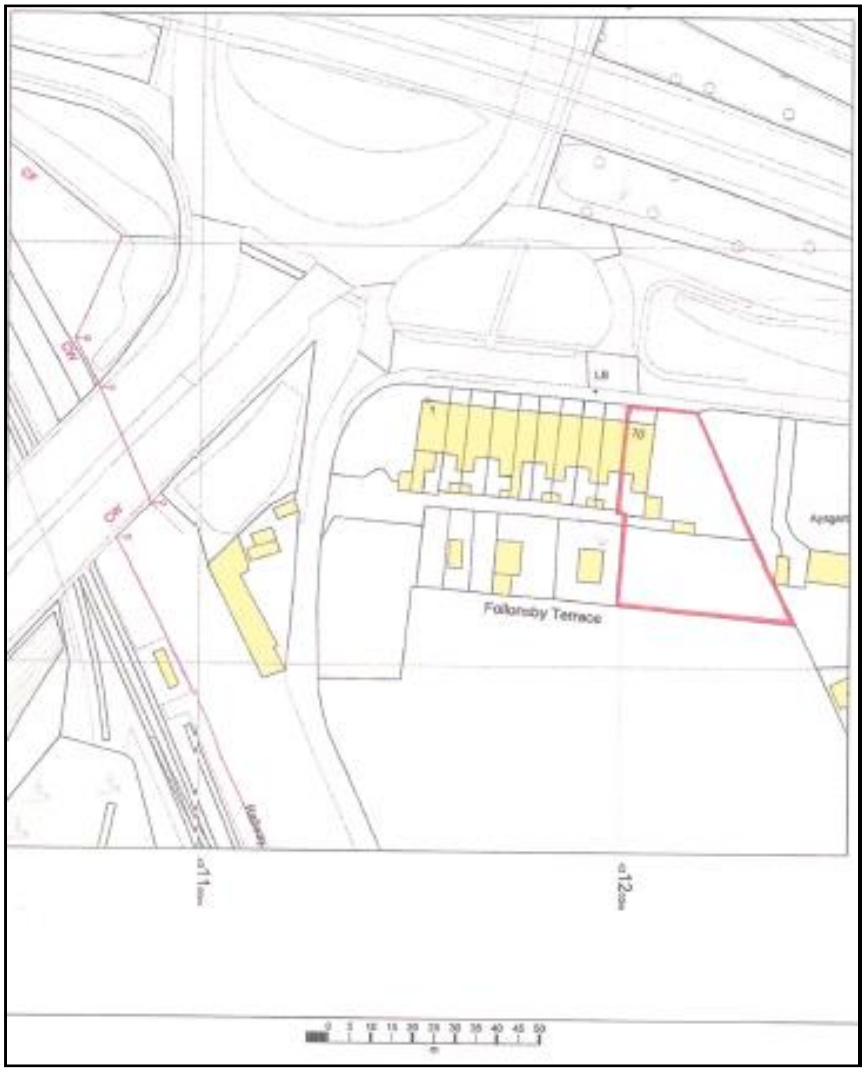
Locally and regionally, the Common Pipistrelle is the most common bat. Both Pipistrelle 45KHz and 55KHz (Common and Soprano) bats are frequent in northern England, although Pipistrelle bats are the most abundant species they are thought to have declined by 70% between 1978 and 1993 (National Bat Colony Survey). Since 1997 monitoring by the National Bat Monitoring Programme (NBMP) has shown that bat numbers seem to be steady with small fluctuations up or down depending on the species and survey type carried out. The Brown long-eared bat is occasional with colonies much smaller in numbers than the Pipistrelle. Daubenton's, Natterer's and Whiskered/Brandt's bats are also occasional but widespread in Northumberland/ with an average colony size being about 35 adult bats.

C3 Objectives of survey

The survey was to determine as far as possible, the presence of barn owls and bats including their roost sites in the building known as 10 Follonsby Terrace, Wardley affected by the proposals. The aim is to prevent any animal being physically harmed, to protect all roost sites where possible and to provide mitigation for the proposed renovation to maintain conservation status.

C4 Survey area Plan of Site – c. Scale 1:1250

The site is located at NZ312612 and is shown opposite.



Photographs of the Site

East gable and outbuilding, showing conservatory.

North aspect of the house.

North aspect of the house and west aspect of outbuilding

South east aspect of the house showing conservatory on the east side.

North aspect of the outbuilding.

C5 Habitat description

10 Follonsby Terrace is located 500m to the east of Wardley, less then 50m south of the A184. Within 300m to the southeast lies a previously opencast site that has recolonised and an industrial area 250m to the south. To the southwest is a golf course and the urban edge of Gateshead. To the northeast and 1km to the southeast arable farmland is present with boundaries of hedgerows and fences. Plantations are present 125m to the west along a disused railway leading to the northwest and southeast.

The area has a low potential for bats as the farmland is mainly arable with little feeding, however the hedges may provide feeding lines and the recolonized land of the opencast will provide some foraging for bats and birds. There is some feeding for bats over the nearby shelterbelts however these are near busy trunk roads and in the sheltered areas around nearby buildings.

C6 Field Survey

C6.1 Methods

A close inspection of the building was made in good light, by torch and endoscope where required. The exterior of the building was examined as far as was feasible for signs of bats: droppings, urine streaks, clean cobweb-free areas on the ridge boards or crevices and potential roost exit holes. All external and internal crevices were checked using a torch and possible roosting sites were noted.

Beneath ledges the ground was examined for feathers, pellets and birdlime that could indicate occupation by barn owls.

C6.2/3 Timing and Weather Conditions

Survey	Date	Timings	Weather
Inspection	3 February 2016	2pm -2:30pm 30min	Fine, dry and mild

C6.4 Personnel

Ruth Hadden - Bat Consultant since 1996, Class Survey Licence WML CL20 (Bat Survey Level 4). Licensed to handle bats and enter known roosts since 1986. Class Survey Licence WML CL15 (Volunteer Bat Roost Visitor Level 1). Registration number CLS0 2762. Qualifications BSc Joint Honours Zoology & Plant Biology, Newcastle upon Tyne. MCIEEM
Ben Hadden - Class Survey Licence CL20 2015-14223-CLS-CLS (Bat Survey Level 2).

C7 Results

The building is a two storey brick built end terrace house with a pitched slate roof with torching and no felt sarking. The loft space is insulated with glass fibre, which is very dusty from the loose torching but showed no traces of bats. The ridge was cobwebbed and no odour of bats was noted, the wall tops were open. Externally the pointing and ridge are sound with no suitable crevices for bats and the overhanging eaves appeared to be well sealed with no bat droppings present. A slate mono-pitched brick built extension with no loft space runs at ninety degrees south to the house. No bat traces or good bat roost potential was noted externally.

Loft space of outbuilding.

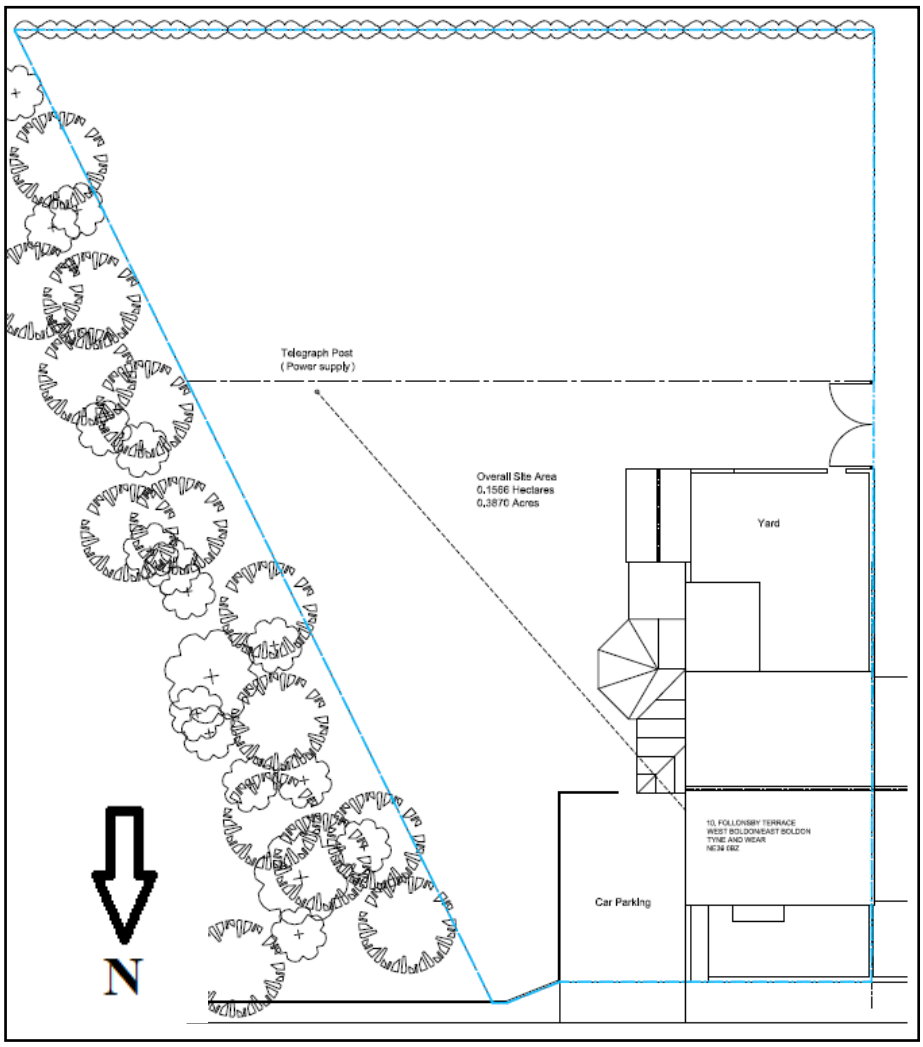
Loft space of main house.

Fire damage to exterior of outbuilding.

Possible bat hibernation sites include any cavities, if present, in the walls/wall tops of the building.

There was no evidence of barn owl activity on site.

Plan of Site



C8 Interpretation and evaluation

Bat presence and populations at certain times of year are only best estimates.

C8.1 Presence - Not applicable.

C8.2 Population size

Not applicable. The occasional male or non-breeding female bat may however be present on the gable wall tops beneath the watertable where they may be present at any time throughout the year.

C8.3 Site status

The building due to be extended has minimal conservation significance for bats as a roost site at present. This assessment takes into account the feeding habitat within 500 metres, the results of the inspection and the potential of the buildings as a maternity bat roost site. The occasional male or non-breeding female bat may be present on the gable wall tops or in a small crevice in walls where they may be present at any time throughout the year.

C8.4 Constraints

No constraints.

D Impact assessment in absence of mitigation

D1 Short-term impacts

Pre-activity impacts are negligible with no changes being made to the use of the buildings.

Mid-activity impacts would be moderate and can cause disturbance, injury and death to bats, if no mitigation is carried out in the eventuality of a bat being located during works, however mid-activity impacts on bats will be negligible if mitigation such as caution and timing to avoid the hibernation period for any demolition work is carried out.

D2 Long-term impacts: roost modifications - Not applicable**.**

D3 Long-term impacts: roost loss

Impacts would be high if no mitigation was carried out during the development phase as bats may be harmed if no care or attention was taken and no potential future roosting spaces would be available.

D4 Long-term impacts: fragmentation and isolation

There are no proposals that will affect bat flight lines.

D5 Post-activity interference impacts

Any additional floodlights that would increase light levels and shine on the bat foraging areas would be a high impact.

D6 Predicted scale of impact

The impact on bats will be minimal on site, negligible in the county and negligible at regional level. However, the proposed mitigation will reduce the impact level to negligible for any bats present on site.

E Land ownership – Mitigation sites

E1 Mitigation site ownership

Mitigation will be carried out on this site, which is all in the ownership.

F References

Altringham J.D. (2003) British Bats. Collins.
Barn Owl Trust (2002) Barn Owls on Site. English Nature
Bat Conservation Trust (2000) Distribution Atlas of Bats in Britain and Ireland. BCT
Bat Conservation Trust (2012) Bat Surveys – Good Practice Guidelines. BCT
English Nature (2004) Bat Mitigation Guidelines. EN
Joint Nature Conservancy Council (2004) The Bat Workers Manual. JNCC
Bat boxes : http://www.nestbox.co.uk/Bat-Box-Single-Chamber-Nest-Box.html
http://www.nestbox.co.uk/Improved-Double-Crevice-Bat-Box.html

SECTION 2
DELIVERY INFORMATION/METHOD STATEMENT FOR CONTRACTORS

This statement should be copied to the site owner, architect, clerk of works and to those contractors whose work may affect bat roosts including those involved in demolition, timber treatment, roofing and building works.

Bats are fully protected by law. To avoid breaking the law by damaging or disturbing bat roosts, resulting in possible imprisonment, fines or confiscation of equipment, certain procedures have to be followed.

Legislation
All bats are protected under the Wildlife and Countryside Act (Schedule 5). They are also included in Schedule 2 of the Conservation Regulations 1994. The Act and Regulations make it illegal to:

Intentionally or deliberately kill, injure or capture (take) bats

Deliberately disturb bats (whether in a roost or not)

Damage, destroy or obstruct access to bat roosts

The Countryside and Rights of Way Act 2000 extended the protection given to bats to cover *reckless* damage or disturbance.

A bat roost is interpreted as 'any structure or place which is used for shelter or protection', whether or not bats are present at the time.

Similarly the Barn Owl is protected under Part 1 of the Countryside Act 1981 and is listed on Schedule 1, which gives them special protection. It is an offence, with certain exceptions to:

- Intentionally or deliberately kill, injure or capture (take) any wild barn owl.
- Intentionally take, damage or destroy any wild barn owl nest whilst in use or being 'built'.
- Intentionally take or destroy a wild barn owl egg.
- Intentionally or recklessly disturb any wild barn owl whilst 'building' a nest or whilst in, on, or near a nest containing young.
- Intentionally or recklessly disturb any dependant young or wild barn owls.

Identifying roosts
Pipistrelle the most common bat, favours small crevices and spaces between brickwork, timber and roofing felt. Bats are small mammals and when at rest the bodies are only 4-6 cm long, their fur colour can range from brown to pale and dark grey. When disturbed the bat is likely to be torpid and unable to fly effectively for some minutes, because of this they are vulnerable to injury as they are not fast moving and may fall to the ground breaking bones or be accidentally crushed. Basically, when material from the roof and tops of the walls is removed any crevices underneath should be checked to ensure that no bat has been disturbed.

Other traces that can indicate a past presence of bats are their droppings. These resemble mouse droppings but unlike mouse droppings can be crumbled to dust between finger and thumb. Droppings may be found on wall tops and beneath slates and tiles on top of any sarking.

Photo showing disintegrated bat droppings beneath coping stones. If examined carefully, in the black dust exoskeletons of insects can be seen shining.

A1 Mitigation strategy

A.1 Summary of mitigation strategy

To maintain bat populations in the area the following will be carried out:-

- Sensitive timing of any demolition works between spring to autumn to avoid hibernating bats.
- Provide Method Statement to contractors.
- Advice given for the safe removal of any bats found from harm during the development.
- External lighting will be on a relatively short timer, directed away from bat flight paths and motion-sensitive only to large objects

Timing
Any development work involving dismantling any brick work and the removal of any existing roof materials (water tables or slates) will be carried out avoiding the hibernation period (November to March inclusive). Periods of cold weather (below 5ºC including night temperatures) will be avoided as any bats present will be in hibernation torpor and be extremely vulnerable. If torpid bats are encountered and disturbance is unavoidable the bat will be taken into care and fed until suitable conditions for release at the site is possible.

Contractors
All contractors will be aware that bats may be present in the area and could be present when removing the roof or brickwork etc and may be found torpid in wall cavities if any. Table 1 below highlights where bats may be found and the recommendations. Any bats found during operations will have the cavity re-covered for its safety and any work in the vicinity will cease. Ruth Hadden to be informed for advice immediately (01661 886562). As only licensed bat handlers can move bats and the contractors are not permitted to handle bats, the bat will be allowed to disperse of its own accord.

If a barn owl is found unexpectedly during operations the cavity will be re-covered or protected and work will cease in that area. Ruth Hadden to be informed (01661 886562) immediately for assistance.

Table 1 General Methodology for Extension Works

STRUCTURE	METHOD	INSPECT
Roofs	Remove any ridge tiles, slates or roof coverings including loose felt by hand, lifting vertically to prevent any bats from being crushed. Removal of any timbers/beams. Avoid blocking any external pre-existing gaps by leaving 15 x 20mm access point.	Check any crevices underneath the roofing materials including the underside, as it is removed. Check any crevices around the beams as work proceeds.
Walls/Eaves	Expose the wall tops. Remove any gutters. Dismantle walls, by hand.	Examine for bat droppings and any wall cavities for bats.
Walls - Pointing	**Only point crevices where the full depth can be seen. Leave 2 crevices per wall beneath the eaves that are 10cm deep and high and 2 to 1cm wide**	Check deep crevices for the presence of bats using a torch.
Windows/doors	Remove windows, doors and frames by hand, where gaps exist around the frames.	Examine any cavities exposed. Avoid blocking any external pre-existing gaps.

B Works to be undertaken by the ecologist or suitably experienced person.

B1 Capture and exclusion

If any bat is found unexpectedly during operations the cavity will be recovered or protected and work will cease in that area. Ruth Hadden to be informed (01661 886562) immediately for assistance.

C works to be undertaken by the Developer/Landowner

C.1 Bat roosts

C1.1 In-situ retention of roost(s) - Not applicable.

C1.2 Modification of existing roost(s) - Not applicable.

C1.3 New roost creation - Not applicable.

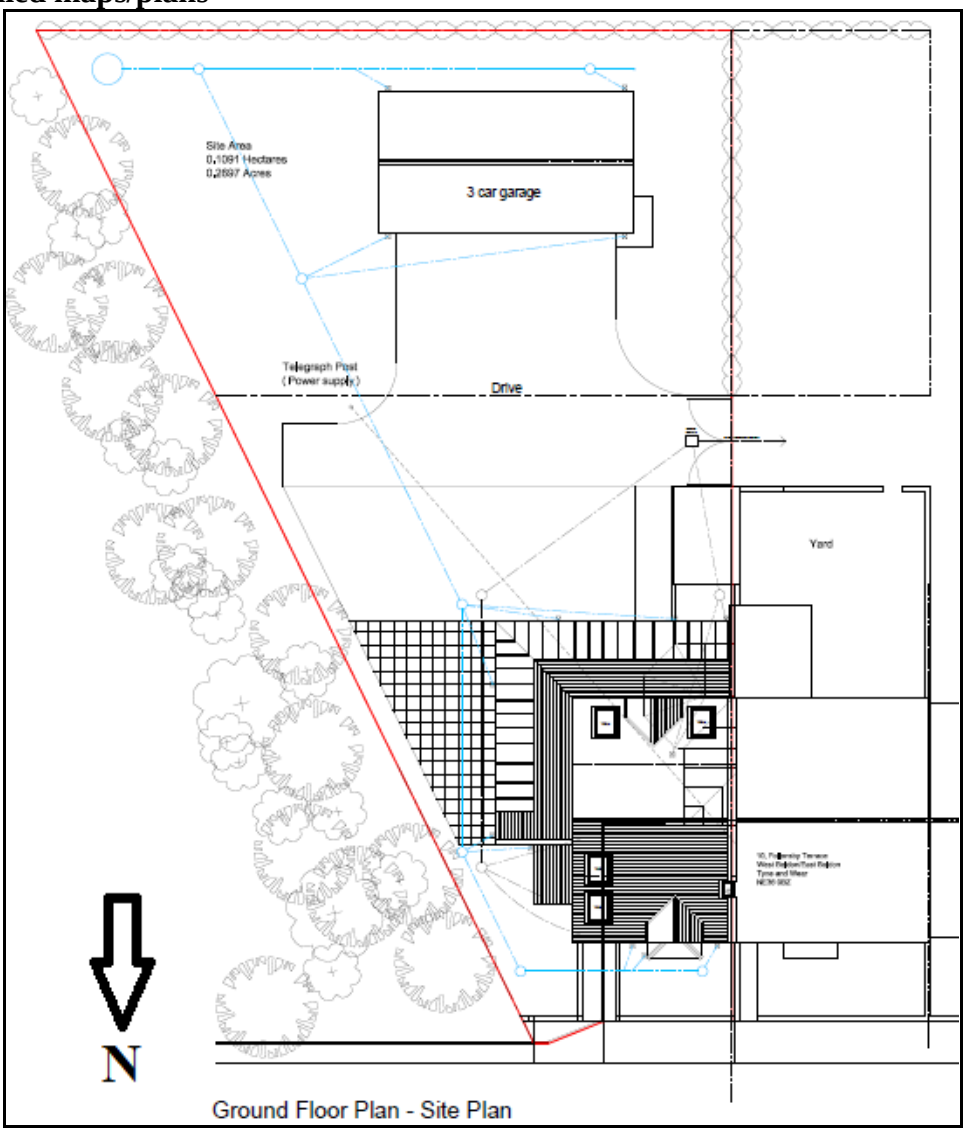
Bats will roost in wall cavities, on the wall tops; hang from the ridge board or between the roofing felt and slates, depending on the species. Brown long-eared and Natterer's bats like to use the roof space, hanging from the ridge beam and only require an access hole. Pipistrelle species and Whiskered/Brandt's bats prefer to roost in small cavities often staying on top of the wall and do not enter the open roof spaces.

Wooden beams and timbers will be treated only with 'bat friendly' products, permethrin or cypermethrin as insecticides for example. Further information is available if the contractor requires it.

A traditional felt or wood sarking that would give bats some grip will be used where bat provision will be provided and not a more modern smooth membrane.

Any external lights will be set on a motion detector and short timer and be positioned in such a way that they do not shine on any of the bat access positions or the buildings, as this can deter bats.

C.1.4 Scaled maps/plans



D Post-development site safeguard

D.1 Habitat/site management and maintenance

Any water tanks present in the buildings will be covered to prevent debris and bats from falling in.

D.2 Population Monitoring

Due to the low bat activity on site no monitoring will be carried out to assess the success of mitigation. (Bat Mitigation Guidelines 2004, Section 7.2) Ruth Hadden available to liaise with the owners as required regarding the mitigation.

D.3 Mechanism for ensuring delivery

Bat mitigation as shown on the plans will be subject to the conditions of the Planning Consent when granted.

E Timetable of works

Not known at present.