Wold Ecology
Bat Mitigation
Method Statement
For
Grosmont Methodist Chapel
Grosmont

NYM/2011/0275/FL

NYMNPA 22 FEB 2012

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Wold Ecology 2 Redwood Gardens, Driffield, East Yorkshire. Y025 6XA. 01377 200242

Method Statement

A Mitigation and compensation

A1 Summary of Mitigation Strategy

A European Protected Species development licence will be obtained prior to re roofing work and barge board removal at Grosmont Chapel.

Based on the bat activity surveys carried out by Miles Worron (May 2011) and Wold Ecology (January 2012), it has been determined that Grosmont Chapel supports four common pipistrelle summer roosts.

To summarise, the mitigation strategy includes:

- Pre works survey of Grosmont Chapel.
- Roof stripping is planned to start in March 2012.
- Strategies for safely removing bats, if present, from danger during the repair work to the buildings
- The re-instatement of the roosts through the inclusion of permanent bat boxes, gaps underneath slates on the roof and the provision of crevices in the stonework.
- External lighting will be directed away from all bat roost access points and flight paths.
- Security lighting will be on a short timer and motion sensitive to large objects only
- Contractors on site to receive an induction on bat species present at Grosmont Chapel and provided with a Method Statement. The contracted builders have previous experience with working around bats and development licenses.

The mitigation strategy will ensure that the bat populations at the site are maintained at a favourable conservation status.





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

B.1 Capture and exclusion

B1.1 Timing

The re roofing works to building A will start in late February - March 2012. The roof will be completed and roosts re-instated before 1st June 2012. The internal refurbishment will be completed during autumn 2012.

B1.2 Site Induction

A tool box talk will be given to all contractors and others involved in the works prior to the start. This will provide background information on bats at the site, where bats are likely to be found and what to do if bats are unexpectedly discovered during works, as outlined in section B1.6. In the event that bats are found during works then all work will stop immediately. The ecologist; will be contacted immediately for advice, on 07789 783116.

B1.3 Pre-Works Surveys

An assessment by the ecologist will be made to determine the current level of bat activity on site. An endoscope (Model: RIGID SeeSnake Micro endoscope with a 9.5mm camera head and 1m extension cable) search will be undertaken, concentrating on the gaps in stonework, underneath the eaves.

B1.4 Blocking Known and Potential Roosts

Following the endoscope survey, all known or potential roost sites, identified as not occupied by bats, will be blocked immediately using pieces of foam (or similar material). If hibernating bats are encountered they will be left in situ. Once the bat has left then the roost site will be blocked immediately using pieces of foam (or similar material).

Once the ecologist is satisfied that the internal wall no longer is occupied by bats, then the building work can proceed.

B1.5 Destructive Search

In order to further reduce any unnecessary disturbance, injury, or death to any late discoveries of individual bats the roof will be carefully stripped back. If bats are encountered they will be removed by hand and placed into bat boxes located on the site. Works will be undertaken from scaffolding, a mobile elevated work platform (MEWP) or similar working platforms (see C.1.4, figure 1).

B1.6 Discovering Bats

The work to the chapel will start in late February/March 2012 and there remains a possibility of encountering torpid bats. If torpid bats are discovered during works the work on the site will stop immediately and Wold Ecology will be contacted on 07789 783116 for advice. If bats are encountered they will be carefully removed and placed in a Schwegler 1FS winter woodcrete box, designed to accommodate hibernating bats, will be available on Site.



If any torpid bats are disturbed and aroused they will be taken into care (as directed by the Bat Workers Manual, section 7.3, pages 64 - 66: 3^{rd} edition 2004) and fed until such time when conditions are suitable (night time temperature are $>6^{\circ}$ C) for them to be released at dusk in the mitigation area. The 1FS bat box will be located on the south gable of the vestry (see C.1.4, figure 1).

Bats will only be handled by a licensed ecologist. Gloves will be worn and the ecologist, as aforementioned, will have an up-to-date rabies vaccination.

B1.7 Exclusion of known roosts

If bats are discovered in the chapel after the hibernation period, when temperatures >6°C, one way exclusion devices will be used. They will either be constructed from a plastic acetate sheet (or similar material) or a section of smooth drainage pipe with a diameter of 50mm. The devices will be secured by mortar, expanding foam and/or gaffer tape (or similar adhesive). Care will be taken to ensure that bats cannot come into direct contact with adhesive. This will allow the bat to leave the roost but prevent its return. The method of exclusion will follow the guidance within the Bat Workers Manual (JNCC 2004), Chapter 9: Public Relations, Section 9.1.2 Exclusion of Bat Colonies page 69-70. Once the ecologist is satisfied that the roosts are not occupied, then access points will be blocked immediately with pieces of foam, prior to work proceeding. Gaps and cracks with potential to be used as roosts will also be checked with an endoscope and blocked during exclusion.

Following four consecutive nights of temperatures > 8°C the roost sites will be inspected and if vacated exclusion devices removed and roost blocked. This will ensure that bats have been excluded before roof stripping and demolition works proceed.



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C Works to be undertaken by the Developer/Landowner.

C.1 Bat roosts

C.1.1 In-situ retention of roost

A minimum of two, existing gaps, in masonry, underneath the eaves, on the south elevation will be retained. These will be identified by the ecologist (see C.1.4, figure 2 and 3a).

C.1.2 Modification of existing roost

There will be no modification of roosts on site.

C.1.3 Temporary Roost Creation

A Schwegler 1FS winter woodcrete box will be erected on the south gable of the vestry between February and 30 April 2012. The box will be used in case bats are discovered during winter works (see section B) and (see C.1.4, figure 2, 3a and 3b).

C.1.4 New roost creation

Compensation roosts will be included in the new development by providing:

- access underneath four slates on the south elevation of the chapel roof
- Access under one slate on the west elevation of the vestry roof
- Access underneath two slates on the north elevation of the chapel roof
- Access under the eaves at two locations on the south elevation. These should make use
 of existing gaps, utilised by bats and identified by ecologist.

(See C.1.4, figures 2 & 3a).

To enhance the availability of roosting habitat, a Schwegler 1FF or 1FQ (or similar) will be positioned on the west gable of the chapel (see C.1.4, figures 2, 3a, 3b, 3c and 4). If there is any delay to the building schedule the bat boxes will also provide additional, temporary roosting habitat. The bat boxes will remain on site post development.

This mitigation strategy will ensure that the bat populations on site are maintained at a favourable conservation status by the retention and creation of roost sites at the Site.

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C.1.4 Scaled Plans and Photographs

Figure 1 - Current roost locations and destructive search focus points

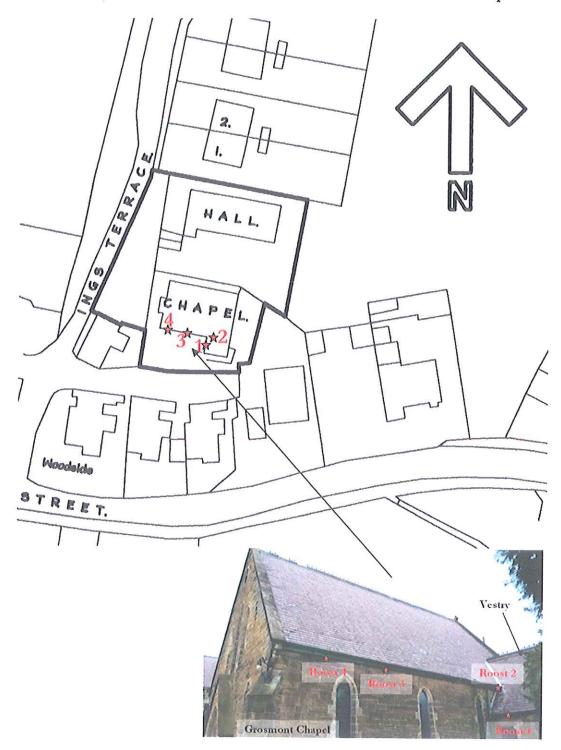
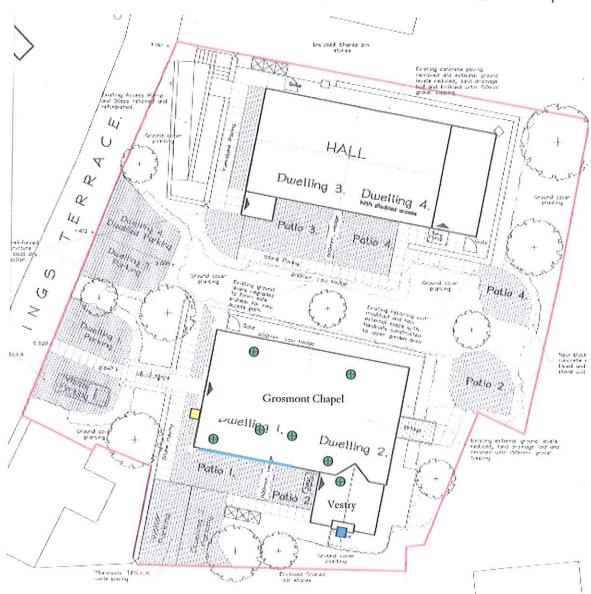


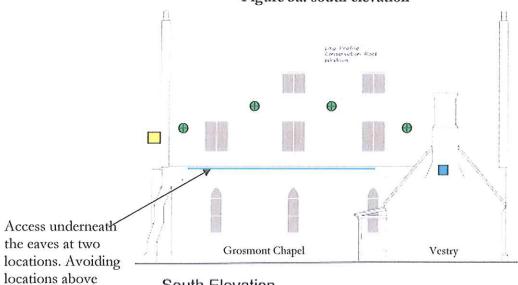


Figure 2 – Post development site plan and location of mitigation. N



- Location of bat slates
- ☐ Location of Schwegler 1FF/1FQ bat box.
- Location of temporary Schwegler 1FS bat box.
- Access underneath the eaves at two locations on south elevation. Avoiding locations above windows.

Figure 3: Bat roost provision at Grosmont Chapel Figure 3a: south elevation



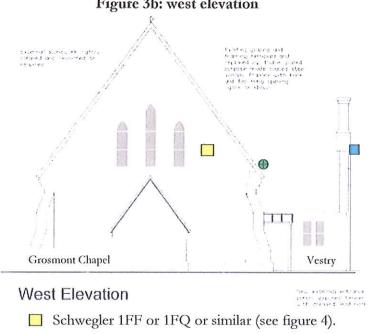
South Elevation

windows.

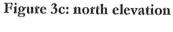
- Access is provided under slates in four locations. Bats must have access to gap between slate laths and roof lining. Slates will be set in diminishing course so must have access to space of minimum 500mm between slate lath rows. A minimum gap of 20mm is
- Location of temporary Schwegler 1FS bat box.

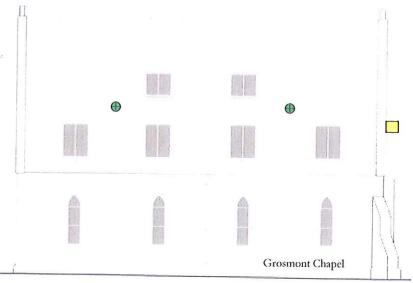
Figure 3b: west elevation

provided (figure 5a and 5b).









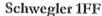
North Elevation

Access is provided under slates in four locations. Bats must have access to gap between slate laths and roof lining. Slates will be set in

- diminishing course so must have access to space of minimum 500mm between slate lath rows. A minimum gap of 20mm is provided (figure 5a and 5b).
- Schwegler 1FF or 1FQ or similar (see figure 4).

Figure 4 - Bat Boxes



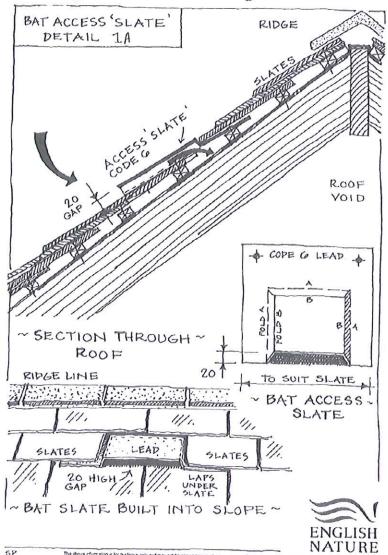




Schwegler 1FQ



Figure 5a - Access slate design detail.



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D Post-development site safeguard

D.1 Habitat/site management and maintenance

Management and maintenance of the Site is the responsibility of Mr Rod Hodgson. Mr Hodgson has a positive attitude to the conservation of bats and wishes to protect and enhance habitats and roosting opportunities as much as possible.

The bat boxes have a life of 20 years and are self cleaning therefore will not require specific maintenance or management. Theoretically, they will not need replacing until 2032. However, the condition of the bat boxes will be monitored every two years and if they are found to be in poor condition, they will be replaced. This will be initiated by the Mr Hodgson. Bat boxes will be maintained in the autumn months.

- D2 Population monitoring, roost usage etc.
- D2.1 A compliance monitoring visit will be made by an experienced the ecologist once mitigation measures for bats are in place.
 - This visit serves to check that the Method Statement requirements have been implemented correctly, and will take place while contractors are still on site so that any necessary amendments can be made immediately.
 - The visit comprises a daytime survey.
- D2.2 Population monitoring visits will be made during July 2013 by experienced bat ecologists. Licence periods cover post development monitoring so this must be undertaken as a condition of the licence. Post development monitoring data must also be collected in accordance with the licensed method statement and returns sent within the specified timeframe to Natural England and, if appropriate, to the Local Record Centre. Natural England (December 2011) state that 'it is a condition of this licence that any post development monitoring data (e.g. survey data and habitat assessment), including 'nil' returns, are submitted to Natural England to arrive not later than 14 days (two weeks) after the expiry of the licence. Post development survey data (except nil returns) must also be sent to the relevant Local Biological Records Centre within this time period'. The population monitoring visits are necessary to determine:
 - Whether the mitigation measures have been successful and whether any modifications may be necessary to improve success. This information is essential in informing future conservation strategies.
 - The visit will comprise a building survey and a dusk emergence survey, commencing approximately 30 minutes before sunset and continuing for a period of around 2 hours. Bat detectors and recording devices will be used by all ecologists for these surveys.

No further maintenance will be required on these buildings for the foreseeable future.

D.3 Mechanism for ensuring delivery of post-development works

It is the responsibility of Mr Hodgson to ensure that the post development work is undertaken. Post development surveys and mitigation is required so that Mr R Hodgson complies with the Conservation of Habitats and Species Regulations (2010), planning permission and the conditions of the Natural England license.



Full planning permission was granted by North York Moors National Park Authority on 3rd August 2011; decision number NYM/2011/0275/FL.

Informative 13 states:

13. The guttering to the development hereby permitted shall be directly fixed to the stonework by means of gutter spikes (other than where existing fascia boards exist), with no fascia boarding to be utilized in the development and shall thereafter be so maintained.

Informative 18 states:

 The development hereby permitted shall not be carried out until a Bat Method Statement has been submitted to and approved in writing by the Local Planning Authority.

Failure to implement the bat mitigation measures will result in a violation of the planning permission and the Natural England license. It is the responsibility of Mr R Hodgson to ensure that the post development work is undertaken.

E. Landownership

E1 Mitigation Landownership

- E.1.1 The land where the mitigation will be implemented is owned by Mr R. Hodgson.

 I confirm that relevant landowner consent/s has/have been granted to accept bats into roosts onto land outside the applicant's ownership Yes/No/Not applicable
- E.1.2 I confirm that landownership consent/s has/have been granted to allow the creation of the proposed habitat compensation on land outside the applicant's ownership Yes/No/Not applicable
- E.1.3 I confirm that consent/s has/have been granted by the relevant landowner/s for monitoring and maintenance purposes on land outside the applicant's ownership Yes/No/Not applicable

F Timetable of works.

Activity	Timing	Notes
Erect temporary 1FS bat box on vestry	February 2012	Temporary roost during re roofing works. Located on south gable.
Pre-construction preparation and construction of scaffold against the chapel.	March 2012	Pre-work inspections and supervised by ecologist. Prepare roof for stripping i.e. endoscope survey and blocking.
Erect two 1FF/1FQ bat boxes.	March – 30 April 2012	West gable of chapel.
Start and complete roof strip and refurbishment.	March – 1 st June 2012	Remove tiles and felt by hand; supervised by licensed ecologist.
Provision of compensatory roosts.	<31 st May 2012	Access underneath slates and access under eaves retained.

Year	2013	
Details	An emergence survey will be conducted in July. A bat box and bat loft check will be	
	conducted between late- August and mid- October	

