Ecological survey:
Protected species survey (Bats).

‘Mizpah’
Bell Lane,
Hinderclay,
Suffolk.

Final report: 2nd May 2023.

Author: John Parden
Natural England Bats (All species) Licence No. 2015-14697-CLS-CLS
Natural England Great Crested Newt Licence No. 2021-53785-CLS-CLS (GCN)

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1.0: Executive Summary:

John Parden of JP ecology was commissioned by Jon Vennings Architects to undertake a bat survey for the replacement of walls at 'Mizpah', Bells Lane, Hindrclay.
The brief stipulated that the application was for repairs only, in the form of replacement of collapsed walls to secure the properties structure. Planning permission is required under listed building consent. There are no proposed alterations to the property in the form of extensions.

The site was surveyed by John Parden of JP ecology on 26th April 2023 for protected species and habitats, specifically Bats.
The habitats within the defined development area were built environment only, as this related specifically to the repairs to collapsed walls only.

Desktop survey – A desktop survey, using data supplied by SBIS, identified no records of bats on the site.
The SSSI Risk Zone assessment generated no need to consult with Natural England.

Bats – The area of the building subject to survey were of 'negligible' bat roosting potential.
In accordance with current guidelines no further surveys are required.

All other protected or rare species - No other protected species or habitats are relevant to this planning application.

Note on limitations of survey: Access to the loft space above could not be gained and consequently it was not possible to determine whether bats were occupying that space. Given the brief stated that the current application was for essential repairs to the walls only and that the roof and loft space will be undisturbed, then it is reasonable to suggest that the repairs to the walls necessary to secure the property can proceed irrespective of the absence or presence of bats in any other part of the property.

This survey does not extend to works to the roof. Should a future planning application be submitted that involves stripping the roof then further surveys will be required to determine the presence or absence of bats within the loft space and appropriate mitigation offered.

Mitigation.
Further surveys.
- No further surveys are considered necessary to support the conclusions on this occasion.

General mitigation – all species.
- The contact details of a suitably licenced ecologist should be made available to the development contractors.
- Advice must be sought from an ecologist if any protected species (bats) are inadvertently disturbed.

Obligatory mitigation.
- Nesting birds –
  - Nesting birds should not be disturbed during the nesting season typically 1st March to 31st August (species dependant).
  - Should it be necessary to strip the site during the nesting season, specifically the demolition of any parts of the barn, the site should be searched by a suitably qualified ecologist for nests and any active nests protected until the young have fledge.

Precautionary mitigation.
- To promote best practice and avoid the risk of causing injury or harm to small mammals, amphibians and reptiles during the construction process the generic method statement attached in appendix 1 should be made available to all contractors.

Ecological Enhancement.
- Birds. - 2 x bird box (house sparrow terrace) to be mounted under the eaves.

Clients responsibility towards protected species.

The site owner has a responsibility to ensure that protected species or their resting places are not killed, injured or disturbed as a consequence of their actions.

Whilst the results of the survey are considered to be conclusive at the time that the survey was conducted, there is always a possibility that protected species might occupy the site between the period of the survey and the commencement of any works on the site. If any protected species are discovered during any construction works a qualified ecologist should be contacted for advice or assistance.

Contents:

2.0: Contact details:

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Natural England Great Crested Newt Licence No. 2015-14697-CLS-CLS

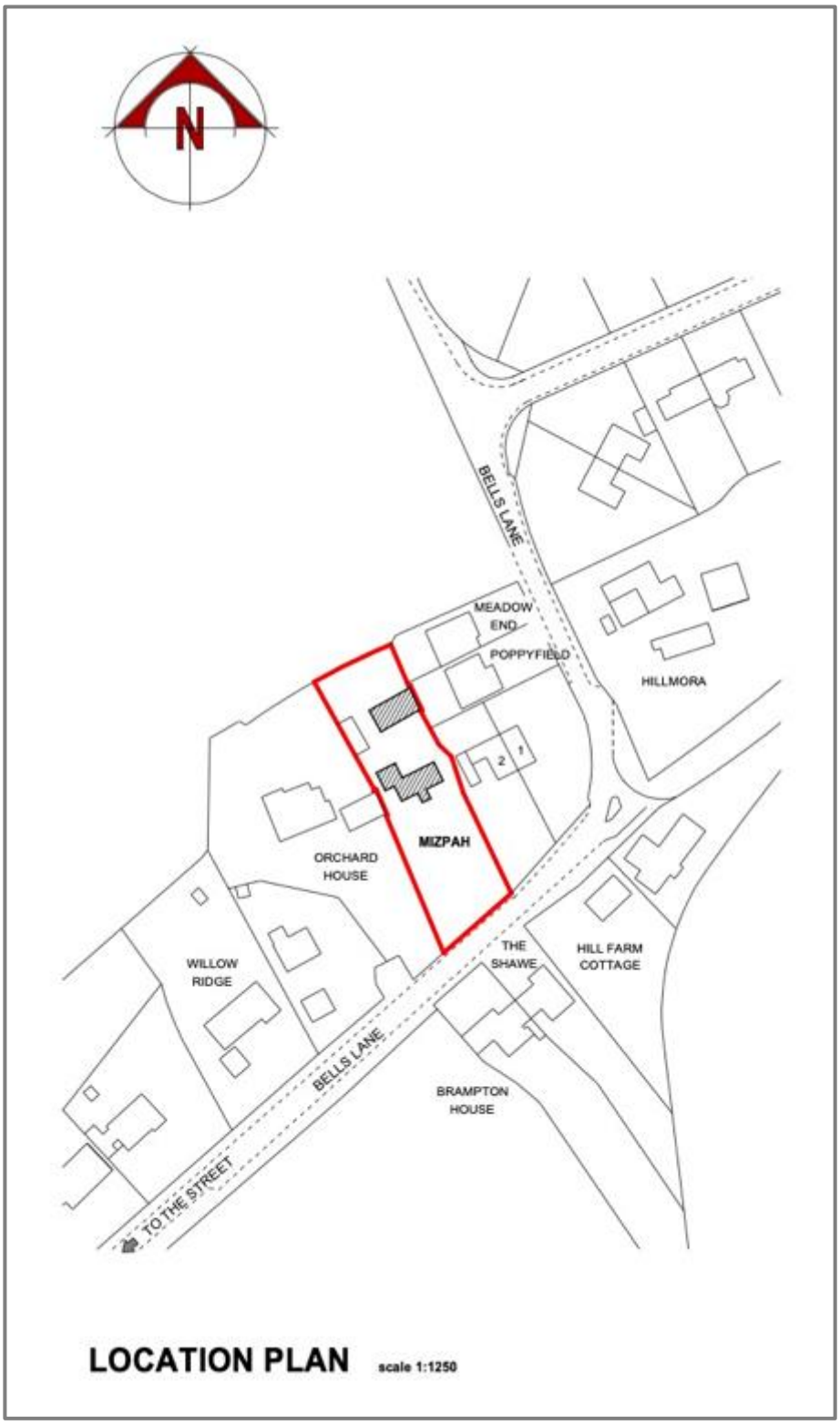
3.0 Introduction:

3.1 Brief:

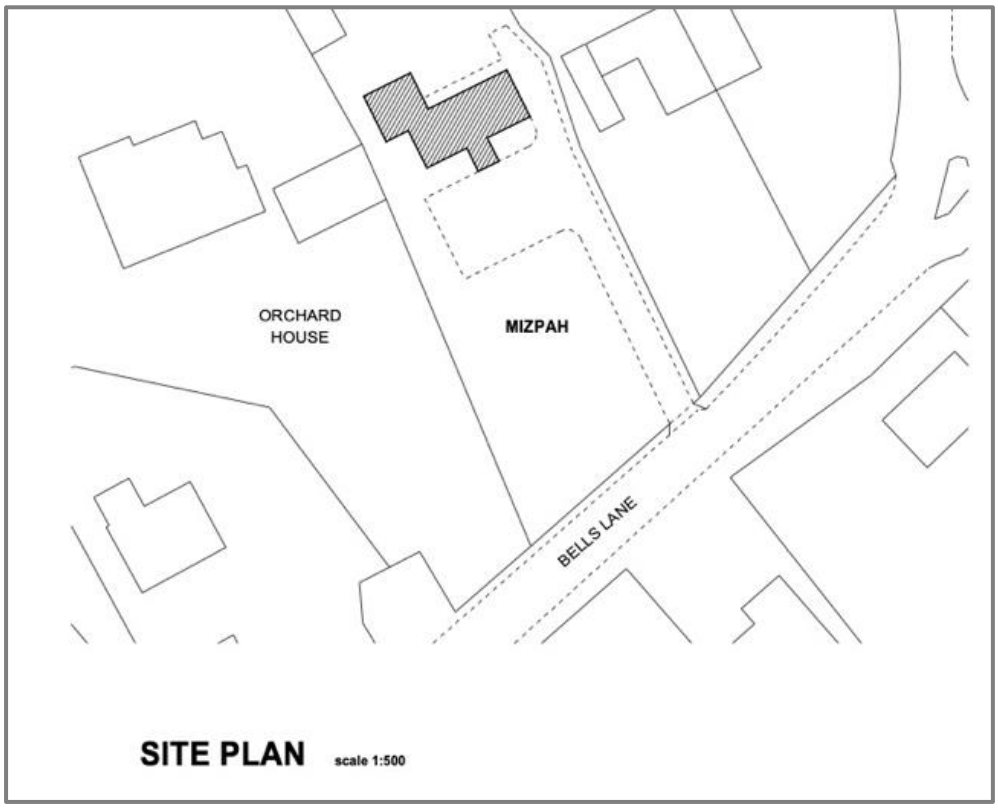
John Parden (Licensed ecologist) of JP ecology was commissioned by Jon Venning (instructing architects) to undertake a protected species survey (Bats) at 'Mizpah', Bells Lane, Hinderclay, Suffolk. IP22 1HW.
The survey is required for inclusion with a planning application for listed building consent to repair the collapsed wall on the property, to enable the planning authority (Mid Suffolk District Council) to determine whether the proposals satisfy legislative considerations with regard to biodiversity and protected species.

3.2 Site development proposals:

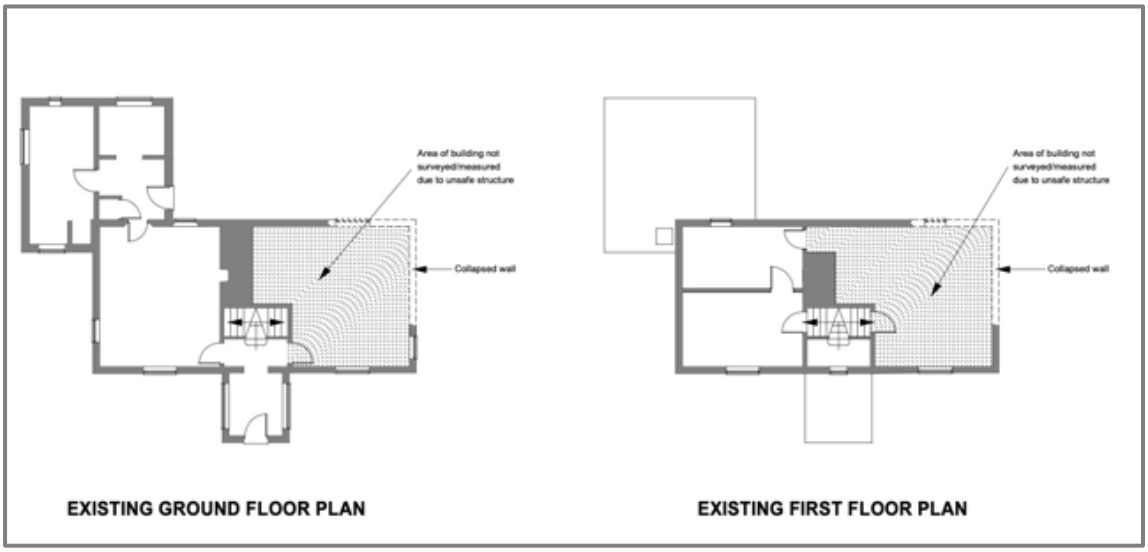
Plan 1. Site location plan and site boundary plan. (Illustrative only do not scale)

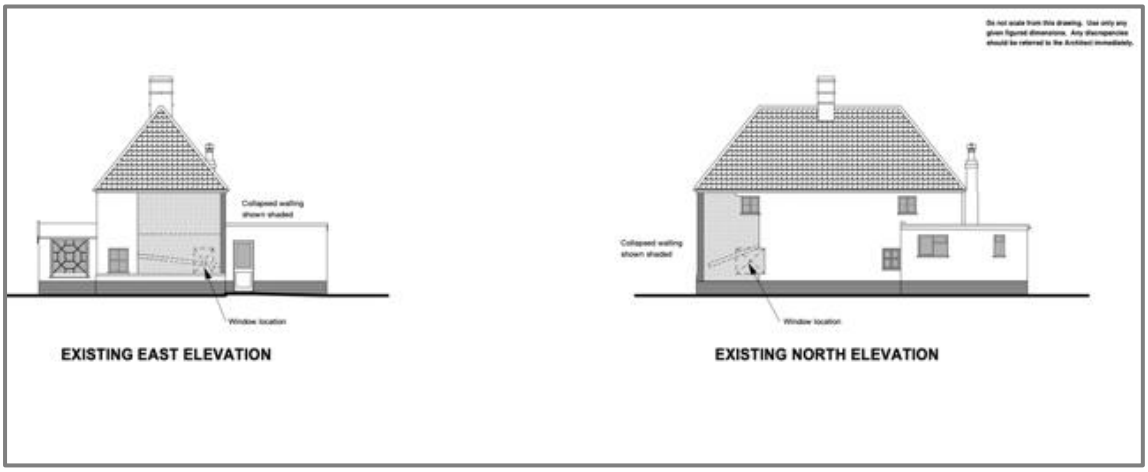


Plan 2. Site plan (Illustrative do not scale).



Plan 3. Showing extent of wall collapse. (Illustrative do not scale)





The property is subject to a planning application including:

- Listed building consent for the repair and replacement of the collapsed walls.

For the purposes of the ecological survey it is assumed that:

- No temporary access points or temporary hard standing areas outside of the illustrated curtilage (plan 1 above) will be used for site access, construction traffic or storage of building materials.
- All site access will be via existing driveways and service areas.
- All works will be confined to the buildings existing external footprint.

3.3 Scope of the survey:

The survey includes:

In accordance with the architects brief, the application related to the replacement of the wall and specified the requirement for a bat survey.

- The species triggered include:
    - Bats.
    - Nesting birds.
- Consideration was given to all other protected species that may be affected by the development.
- The survey was confined to the area of the wall collapse only.

3.4 Survey objectives:

The survey aimed to establish:

- Whether protected species or habitats were present and would be impacted upon by the development.
- Whether the development will have any impacts upon other sites of ecological interest within the wider landscape.
- Whether the development was likely to have any long-term impact upon the local biodiversity.

3.5 Site & location:

Within the wider landscape: The site is located within a wider landscape that is of medium to high interest for biodiversity, whilst dominated by agricultural land used mainly for intensive arable crop production, a habitat of relatively low ecological interest, it does include features of high ecological interest including grassland and meadows, and pockets of woodland

Within the immediate vicinity of the site: The development site is entirely domestic residence, occupied until recently November / December 2022. The current owners are living in temporary accommodation on site and the grounds and gardens are managed and well maintained.

Natural or semi-natural habitats on the development site.

There are no natural or semi natural habitats on the development site.

There are no natural or semi natural habitats on the site.

3.6 Desktop Survey

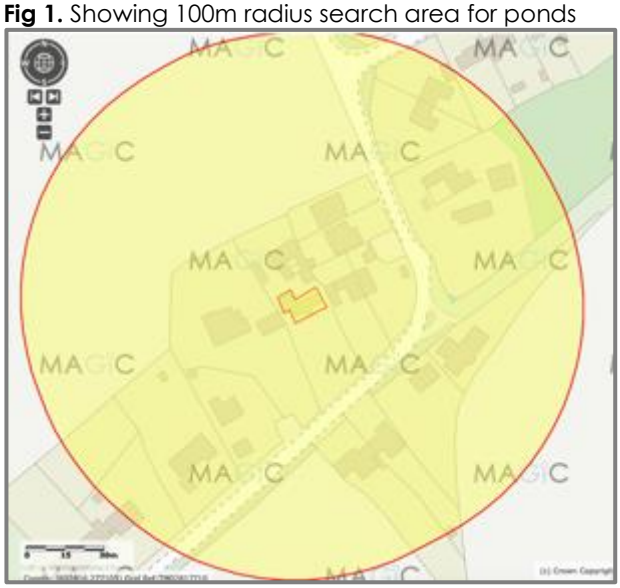
Information on protected species was provided by SBIB.

Pond and waterbodies:
A search area of 100m for ponds and 200m for watercourses was considered appropriate based upon:

- Current Suffolk Biodiversity Planning validation guidelines stipulate:
  - A search area of 100m radius for ponds is appropriate for minor development, being less than 0.5Ha or 10 dwellings.
  - A search area of 200m radius for watercourses.

The search for ponds within 100m radius and watercourses within 200m was conducted using Ordnance Survey Data and publicly available Environment Agency data:

Fig 1. Showing 100m radius search area for ponds



Ponds and watercourses within 200m (see fig 3 above):

- Ponds 1 there is one pond shown on OS maps at OS Grid ref: TM02747708. This pond is known to have become infilled with debris and does not function as an aquatic water feature.
- There are no permanent or named watercourses shown on OS maps within 200m of the site.

Sites designated for ecological interest within a 2km radius
(ref: local records search SBIS, magic.defra.gov.uk)**:**

Sites of Special Scientific Interest (SSSI).
There are is one site nationally designated for its ecological interest with a 2km radius.
Blo'Norton and Thelnetham Fens SSSI.located 1.8km to the north at its closest.
Unconnected to the development site by continuous ecological corridors.

An SSSI risk zone assessment was conducted using Defra Magic maps, This did not return any requirement to notify or request consultation from Natural England.

Fig 2. Illustration the SSSI risk zone analysis results.

County Wildlife Sites (CWS)
There are two locally designated County Wildlife Sites (CWS) within a 2 km radius.

- CWS 85 Hinderclay Fen Approx 1.6Km to the North
  Designated for its fenland interest.
  Unconnected to the development site by continuous ecological corridors.
- CWS 84 Hinderclay Wood Approx 1.5Km to the South East.

Designated for its Woodland interest.
Unconnected to the development site by continuous ecological corridors.

Protected Species.

There were no records of bats, or any other rare or protected species, on the site.

Of those species potentially relevant to the site for which records were returned.

- Bats. 11 species of bat have been recorded locally in small numbers (2km radius).
  - Pipistrelle bat (unspecified) 59 records
  - Common Pipistrelle (*Pipistrellus pipistrellus*) 16 records
  - Soprano Pipistrelle (*Pipistrellus pygmaeus*) 21 records
  - Nathusius's pipistrelle (*Pipistrellus nathusii*) 1 record
  - Brown long eared bat (*Plecotus auritus*) 19 records
  - Natterer's bat (*Myotis nattereri*) 33 records
  - Daubenton's Bat (*Myotis daubentii*) 15 records
  - Barbastelle bat (*Barbastella Barbastellus*) 16 records
  - Noctule bats (*Nyctalus noctule*) 26 records
  - Myotis bat (unspecified) 15 records
  - Bat unspecified 10 records
- Reptiles and Amphibians.
  - Smooth newt (*Lissotriton vulgaris*) 1 records
  - Common frog (*Rana temporaria*) 3 records
  - 5 records of Grass snake (*Natrix helvatica*)

Other species of significance.

- There are 39 records of hedgehog generally distributed throughout the 2km radius search area with

4.0 Surveys.

4.1 Methodologies

Bat Survey – the bat survey was conducted in accordance with the guidance described in 'Bat Survey Good Practice Guidelines 3rd edition 2016, *Collins J (ed)*.

Other species were surveyed by looking for tracks, droppings, feeding evidence and field signs.

4.2 Scoping Survey Results.

The site was surveyed by John Parden of JP ecology on 26th April 2023.

4.2.1 Habitats

The defined development site (see plan 1 to 3 above) is entirely.

- Built environment, the survey relates to the collapsed section of building only.

4.2.2 Bat survey.

4.2.2.1 Scoping Survey.

The building is constructed from clay lump around a timber frame.

The collapsed section of wall have been cleared however it would appear that the building has solid walls without cavities.

The collapse occurred during the winter of 2022, the architects suggest around November December, and the property was an occupied dwelling prior to that, and consequently the exposed interior of the building would have been enclosed living space and would not have been occupied by bats prior to that.

Whilst potential bat roosting opportunities have been created as a consequence of the recent collapse, it is reasonable to assume they will not have become occupied by bats over the winter period, based upon;

- The exposed bat roosting opportunities are well illuminated and exposed to the elements, making them unfavourable for roosting bats.
- Bats would have been inactive during intervening winter and early spring period between wall collapse and date of the survey.

The intact sections of the building are rendered externally without any cracks, crevices or potential for bats to roost within the walls.

It was not possible to conduct as survey of the loft space as there was no loft hatch within the property.
The application is for the reconstruction of the walls to make the building structurally sound, the works do not extend to the roof and consequently the loft space will be retained and undisturbed as part of this planning application for listed building consent to reconstruct the walls.

A thorough search of the area of the property where the walls had collapsed and the exposed former internal spaces found no bats or evidence of bats in the form of bat droppings, urine splashes, scratch marks, polishing or staining.

Table 1: Illustrating survey results.		
Photo No	**Image**	**Notes**
Photo 1§		Image to show the extent of the collapsed wall.
Photo 2		Image to show the extent of the collapsed wall. Not the roof is enclosed and currently supported.
Photo 3		Image to show the exposed interior of the building

Photo 4 & 5	 	Images to show the condition of the exterior of the building. Showing rendered walls without cracks, crevices or bat roosting opportunities within the walls. Note the roof is intact and enclosed.

4.2.2.2 Discussion and conclusions

In accordance with Best Practice Guidelines the sections of the building subject to repair were assessed as being of 'Negligible' bat roosting suitability based upon;

- The building was an enclosed and occupied dwelling up until the wall collapse, and it is reasonable to suggest bats would not have been roosting within that living space.
- Those bat roosting opportunities that have been created by the collapse are exposed to light and the elements.
- The collapse occurred during the winter and consequently bats will have been inactive between the period of the collapse and the survey.
- No bats or evidence of bats were found in the area of the collapsed walls.

No further surveys are required to support the conclusions.

Should the planning application extend to include removal of the roof then further bat activity surveys will be required to determine absence / presence of bats. If roosting bats are found to be present within the loft space then a mitigation strategy and possible European Protected Species Mitigation Licence may be required, depending upon the results of the findings and the nature of the works involved.

4.2.4 Nesting Birds.

Birds nests were not observed within the buildings at the time of the survey however birds can nest in the most unlikely of locations consequently mitigation is offered in section 5.2.

4.2.5 Other protected species.

No other protected species were relevant to the site.

5.0 Mitigation (also see the Biodiversity Enhancement Plan in Appendix 2).

5.1 Further surveys.

- No further surveys are required to support the conclusions.

5.2 General mitigation – all species.

- The contact details of a suitably licenced ecologist should be made available to the development contractors.
- Advice must be sought from an ecologist if any protected species are inadvertently disturbed.

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Appendix 1.

Generic method statement to avoid harm to reptiles, amphibians and small mammals including hedgehogs and brown hare.

Timing:

(a) Restrict works to the winter period (when amphibians are rarely active above ground) if the site is close to aquatic habitats or Amphibians are relevant to the site.
(b) Keep duration of groundworks as short as possible.

Construction methods and special precautions:

(a) Backfill trenches and other excavations before nightfall, or leave a ramp to allow newts to easily exit.
(b) All open trenches, footings, and pipe runs should be covered with shuttering ply overnight and the edges sealed with damp sand.
(c) Raise stored materials (that might act as temporary resting places) off the ground, eg on pallets.
(c) For pipelines, use directional drilling to cross areas of core habitat and newt dispersal routes.
(d) All caustic materials (cement, lime plaster etc) should be mixed on tarpaulin and folded at night or mixed on the floor of a sealed building.
(c) No caustic material should be allowed to contaminate the adjacent ground or allowed to form run-off that may contaminate ponds or watercourses.
(d) All piles of rubble and spoil should be removed from site and not left during late summer / winter to form hibernacula for Amphibians and reptiles.
(e) All waste materials should be stored in skips resting on areas of shingle/bare or hard standing.
(f) Keep vegetation around the developed site should be kept short to discourage use by reptiles and amphibians.
(g) Fire sites should be in a designated area on shingle/bare ground and well away from the ponds/water bodies and should be burnt daily, they should always be checked for sheltering mammals eg. Hedgehogs.
(f) Avoid installing structures that act as barriers close to ponds, or include gaps at ground level where walls or fences are unavoidable to prevent entrapment of reptiles, amphibians or small mammals within the construction area.
(g) If any protected species (e.g. bats, great crested newts) are discovered during the redevelopment then work should stop immediately and advice sought from an ecological consultant.
(h) If in any doubt contact a Natural England Licenced ecologist:
John Parden of JP ecology 01379 586830