Bat survey of uninhabited rectory and stone granary building, Oghambawn, Tubbercurry, Co. Sligo

Report Prepared for

John Halligan Architects

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[redacted]

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ABSTRACT

Structure: The Rectory, Oghambawn, Tubbercurry, Co. Sligo

Latitude & Longitude: 54.051862, -8.7157269

Bat species Present: Brown Long-eared (c. 5 bats), Soprano pipistrelle (c. 21 bats)

Bird species present: Swallows nesting in granary

Proposed Works: Demolition of house and granary. New housing estate

Impact on Bats: Loss of roost sites in house and in granary building

Impact on Birds: Loss of nesting sites for swallows in granary building

Bat Survey by: Caroline Shiel

Date of survey: 14th June 2025

A derogation licence from National Parks and Wildlife Service will be required to allow demolition of the granary building as it has been confirmed as a roosting site for bats.
It will be necessary to construct a new purpose-built roost building on site for bats (Plans attached).

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1. SUMMARY

I was contracted by John Halligan Architects to conduct a bat and bird survey of an uninhabited two storey dwelling house and granary building to rear at Oghambawn, Tubbercurry, Co. Sligo
The property is no longer occupied. It is proposed to demolish the house and granary to facilitate the building of a new housing estate of 15 houses.
The buildings were surveyed internally and externally on 14th June 2025. A bat detector survey was conducted outside the property at dusk on 14th June 2025 by two surveyors.

2. AIMS OF BAT SURVEY

(a) To determine the importance of the buildings for bats.

(b) To assess the impact of the proposed demolition works on bats using the site.

(c) To make recommendations to reduce the impact of demolition works on bats using the site.

3. INTRODUCTION

3.1 Bat Species

Bats belong to the Order Chiroptera and to date nine species are recorded as resident in Ireland. These nine species are divided into two families – Family Vespertilionidae which contain nine of our Irish species (Daubenton's bat *Myotis daubentonii*, Natterer's bat *Myotis nattereri*, Whiskered bat *Myotis mystacinus*, Leisler's bat *Nyctalus leisleri*, Long-eared bat *Plecotus auritus*, Soprano Pipistrelle *Pipistrellus pygmaeus*, Common Pipistrelle *Pipistrellus pipistrellus* and Nathusius' Pipistrelle *Pipistrellus nathusii*) and one species in the family Rhinolophidae –the Lesser Horseshoe bat *Rhinolophus hipposideros.*
Brandt's bat *Myotis brandii* has only been recorded once in Ireland from a site in Co. Wicklow and is classified as a vagrant. In 2013 a single male Greater horseshoe bat *Rhinolophus ferrumequinum* was recorded in Co. Wexford. This bat was also considered to be a vagrant. During the field season of 2020 recordings were made of a Greater horseshoe bat in Co. Wicklow. Further investigations are ongoing.

3.2 Legislation

The serious decline in bat populations both in Ireland and across Europe has led to conservation measures and appropriate legislation being drawn up and implemented in an attempt to stabilise population numbers. It is estimated that bat populations across Europe have decreased by up to 60% in the last 30 years. As they are highly specialised animals, bats serve as biological indicators and are often amongst the first animal species to show signs of population change due to the activities of man. Destruction of roosts and foraging areas, coupled with the widespread use of pesticides, are the key reasons for the decline in numbers of bats in Ireland. Efforts should be made to retain known bat colonies and methods to lessen disturbance to these animals should be incorporated into any development.

Bats' dependency on insects has left them vulnerable to habitat destruction, land drainage, agricultural intensification and increased use of pesticides. Their reliance on buildings has also made them vulnerable to building repairs and the use of chemicals for timber treatment. Roosting or hibernation sites in caves, mines, trees and disused buildings are also often lost to development.

Irish Legislation

Wildlife Act 1976 – In the Republic of Ireland, under Schedule 5 of the Wildlife Act 1976 all bats and their roosts are protected by law. It is an offence to disturb either without the appropriate licence. This Act was further strengthened by the Wildlife Amendment Act 2000.

E.U.Legislation

Under the Habitats Directive 1992 (EEC 92/43), each member state of the E.U. was requested to identify habitats of national importance and priority species of flora and fauna. These habitats are now designated as Special Areas of Conservation (SAC). In Ireland, all bat species, except one are classified as Annex IV species under the Habitats Directive. Annex IV species are species in need of strict protection. The exception is the Lesser Horseshoe bat which is an Annex II species (Priority Species). Annex II species are species requiring the designation of Special Areas of Conservation specifically for their protection. All species of bat in Ireland are strictly protected under the Habitats Directive to include deliberate disturbance of these species, particularly during the periods of breeding, rearing and hibernation. It also specifies deterioration or destruction of breeding or resting places.

International Legislation

Ireland has ratified two international wildlife laws pertaining to bats

(a) The Convention on the Conservation of European Wildlife and Natural Habitats (Bern Convention, 1982) – part of this convention stipulates that all bat species and their habitats are to be conserved.
(b) The Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention 1979, Enacted 1983). This was instigated to protect migrant species across all European boundaries.

4. PROPERTY: Two-storey dwelling house and stone granary
Grid Reference: 54.051862, -8.7157269

The property consists of a large two-storey dwelling house and a stone granary building to the rear. The property is situated on the northern side of the R294 regional road, in the townland of Oghambawn, on the eastern outskirts of Tubbercurry town. The property is enclosed by mature trees on all boundaries. There is an open grass field to the east of the house and an overgrown garden area directly west of the house (Figure 1). The house is concrete in construction with a slate roof. The granary is a two-storey lofted building with a slate roof.

Figure 1 – Aerial photo showing location of house and granary building to rear

5. SURVEY METHODOLOGY
Daylight Inspection
The buildings were inspected both internally and externally for bats or signs of bats on 14th June 2025 during daylight hours. All rooms on both levels of the dwelling house were

inspected. The attic space was not surveyed due to concerns about the strength of the floor joists but it was possible to view the attics from hatches in the ceilings.
All floors and windows were examined for evidence of bats in the form of dead bats, bat droppings, urine stains, culled fragments of prey.
The external walls of the buildings were examined for evidence of bats using a high-powered torch (Ledlenser Rechargeable System), paying particular attention to gaps between the top of the wall plates and facias. Window sills were inspected for possible accumulations of droppings. Window panes were inspected for bat droppings that may adhere to their surfaces.
The internal and external walls of the granary building were surveyed using a high-powered torch and an endoscope to inspect deep crevices. It was not possible to walk on the loft floor due to the dangerous condition of the wooden boards. However, it was possible to inspect the floor and roof timbers from a trap door in the loft floor.

Bat Detector Survey
A dusk bat detector survey was conducted on 14th June 2025 from approximately 20 mins before sunset (Sunset 22.09) and ran until 23.45. The dusk bat detector survey was conducted by two surveyors - one positioned to the front of the dwelling house and one positioned to the rear of the dwelling house/ front of granary. These surveys were augmented using two thermal scopes. The first scope (Guide Pro 19) was positioned to cover the western elevation of the dwelling house. The second thermal scope (Guide TK612) was placed to cover the western gable and rear elevation of the granary building. The interior of the dwelling house, including the attic spaces, were checked periodically for bat activity. The loft of the granary building was also periodically checked for bat activity. Equipment used included a Pettersson D240X bat detector, a Pettersson D200 bat detector, two Echometer Pros plugged into mini iPads, and two thermal imaging scopes.

6. SURVEY CONSTRAINTS
These surveys were conducted within the recommended time period for surveying bats in buildings which is May to mid-September. Weather was favourable for the dusk bat detector surveys.

7. SURVEY RESULTS
7.1 Daylight survey
The dwelling house was surveyed internally and externally for bats on 14th June 2025. Two small piles of bat droppings were recorded on the second floor of the building – one on the landing and the second in a bedroom. Two Brown long-eared bats were recorded roosting in a curl of wallpaper on the landing, directly above the pile of droppings. The second pile of droppings was under a curtain in an upstairs bedroom. No bats were recorded roosting the folds of the curtain. Several windows have been left open in the house, allowing bats easy access to the house.
No other signs of bats were recorded in the dwelling house. No bat droppings were visible in the attic spaces.

A scattering of bat droppings and culled insect fragments (butterfly wings) were recorded on the floor of the loft in the granary building. This evidence reveals that the building is used as a feeding perch by Brown long-eared bats.
No bats were visible roosting on the roof timbers of the granary.
The external walls, and window cills of the granary building were examined for accumulations of bat droppings. None were recorded.

7.2 Bat Detector Surveys
Bat detector surveys were conducted at dusk on 14th June 2025. The surveys ran from 20 mins prior to sunset until 2 hours after sunset.

Date: 14/06/25
Sunset: 22.09
Weather = Clear, calm & dry.
Temp = 16 C.

The survey commenced approximately 20 mins before sunset (Sunset = 22.09). The survey was conducted by two surveyors with hand-held bat detectors – one at the front of the dwelling house and one at the rear of the dwelling house. Two thermal imaging scopes were set up to record bats emerging from the west elevation of the house and west gable/rear elevation of the granary.
Two Brown long-eared bats were recorded emerging from an open window on the eastern elevation of the dwelling house. No other bats were recorded emerging from the dwelling house and no activity was detected inside the house or in the attic spaces during the survey.

A total of 21 Soprano pipistrelle bats were recorded emerging from the granary building at roof level (9 from the western gable and 12 from the eastern gable). In addition, 3 Brown long-eared bats were recorded emerging from the window in the western gable of the granary. The Brown long-eared bats remained foraging along the tree line to the rear of the granary.
On completion of the emergence survey, the boundary of the site was walked to assess levels of activity of foraging bats along the mature treelines. Brown long-eared bats were recorded foraging along the southern side of the northern boundary and along the western boundary. Both Soprano and Common pipistrelles were recorded foraging along all treelines.

Dawn Survey – tree lines
Dawn = 04.59
Temp = 12C
Weather = Clear, calm & dry

No bats were recorded swarming in the vicinity of any of the trees on the site boundary. No roosts in trees were located. However, it is difficult to assess trees for bat roost potential when they are in full leaf. The canopy prevents a clear view of the trunk and branches.
A tree survey should be repeated in October when the trees have shed their leaves.

8. POTENTIAL IMPACTS OF THE PROPOSED WORKS ON BATS

Demolition of the dwelling house will lead to the loss of a roost site for two Brown long-eared bats. It is likely that these bats move between the dwelling house and the loft of the granary building.

Demolition of the granary building will lead to the loss of a roost site, currently used by 21 Soprano pipistrelle bats. This is most likely to be a maternity roost of bats. A maternity roost is formed by a group of female bats coming together to give birth during the summer months. Three Brown long-eared bats were also recorded roosting in the building.

It is not possible to retain the granary building in the proposed housing development.

It will be necessary to provide the bats with an alternative roost site in the form of a small building with slate roof lined with bitumen felt to recreate the conditions found in the granary (see Appendix for further details).

9. RECOMMENDATIONS AND MITIGATION MEASURES

9.1 Derogation Licence

The proposed demolition works require a derogation licence from the National Parks and Wildlife Service.

9.2 Supervision of demolition works

9.3 Timing of Works

Demolition should take place before 15th October 2025 to avoid the hibernating season for bats.

9.4 Procedure if Bats are found

If any bats are found during the course of this work, work must stop immediately and the local NPWS conservation ranger or other bat specialist contacted. If bats need to be removed they may only be handled by a licenced bat worker.

9.5 Replacement roost

A replacement roost must be provided on site for the maternity roost of Soprano pipistrelle bat and the small number of Brown long-eared bats. This will require the construction of a small concrete block building with slate roof lined with bitumen felt (see Appendix for plans).

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PHOTOGRAPHS
House

Photo 1 – front elevation of dwelling house

Photo 2 – open upstairs window on eastern gable through which two Brown long-eared bats emerged from the house

Photo 3 – rear elevation of dwelling house

Photo 4 – western elevation of dwelling house

Photo 5 – stairs in dwelling house

Photo 6 – sitting room in dwelling house

Photo 7 – dining room in dwelling house

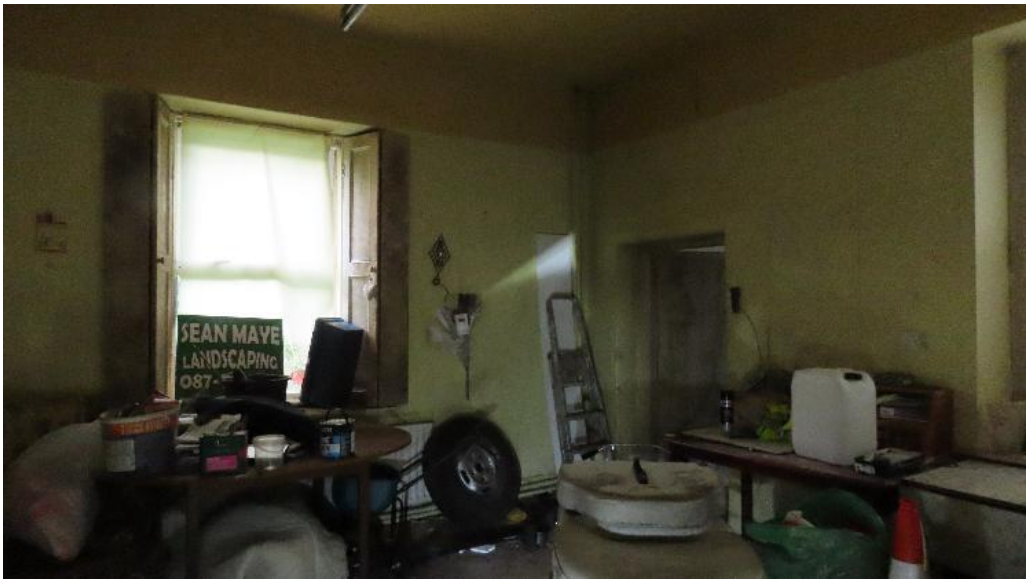


Photo 8 - room to rear of dwelling house


Photo 9 – trap door to attic space

Photo 10 – bedroom upstairs in dwelling house

Photo 11 – bedroom upstairs dwelling house

Photo 12 – upstairs bedroom with bat droppings on floor below curtains. Brown long-eared bats were previously roosting in the curtains

Photo 13 – brown long-eared bat droppings on ground below curtains

Photo 14 – showing position of 2 Brown long-eared bats roosting in peeling wall paper on landing

Photo 15 – two brown long-eared bats roosting in peeling wall paper

Photo 16 – close-up of two Brown long-eared bats

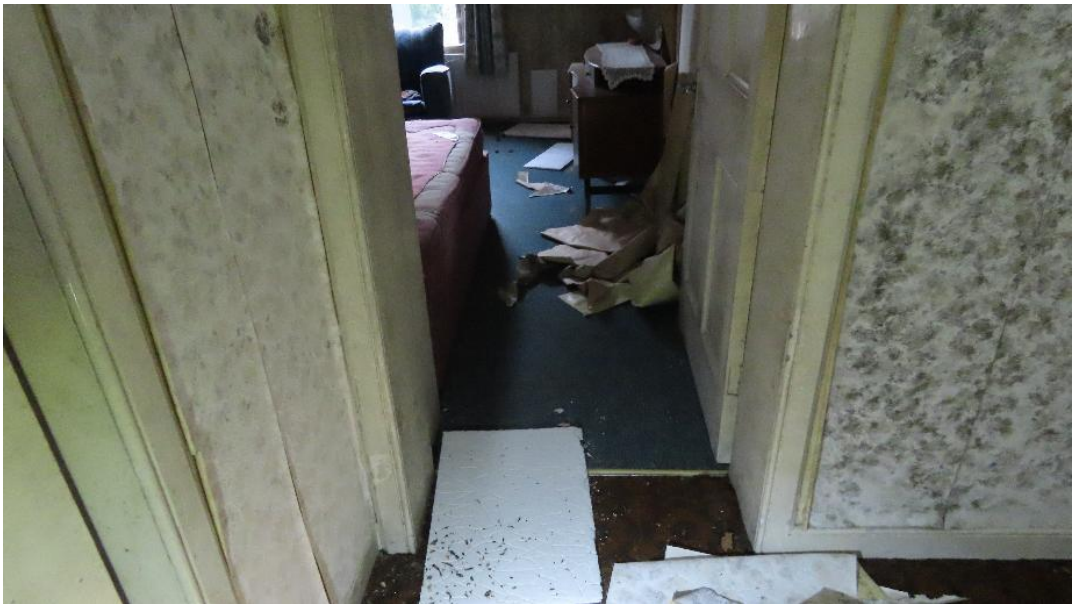


Photo 17 – bat droppings on ground directly below roosting bats

Photo 18 – bat droppings on floor below curtains

Photo 19 – view of attic space of dwelling house

Photo 20 – thermal camera focused on western elevation of dwelling house

Granary

Photo 21 – front elevation of granary. Swallows nesting in lower building

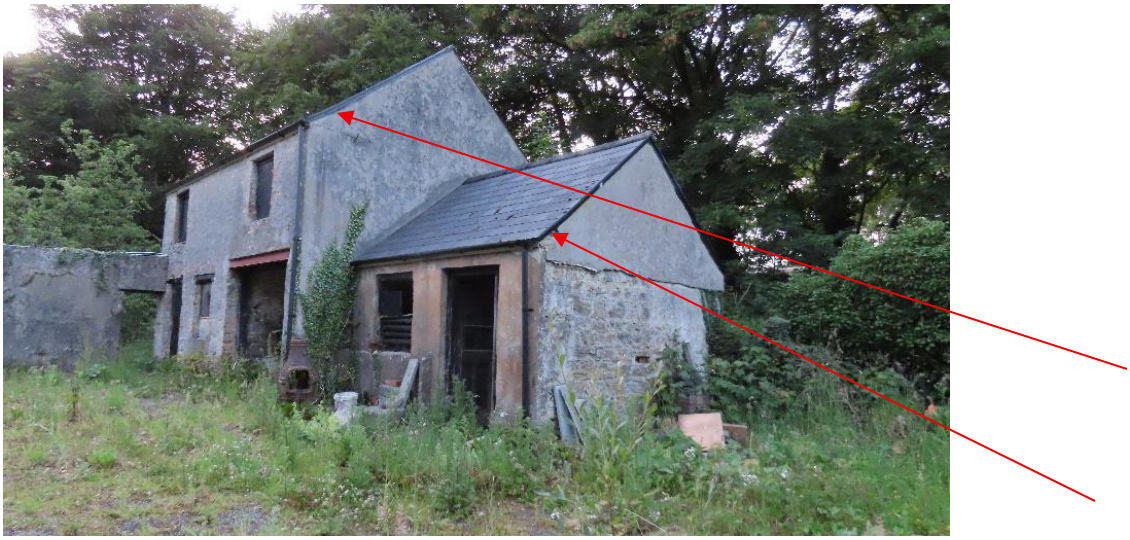


Photo 22 – eastern elevation of granary showing exit points used by Soprano pipistrelle bats

Photo 23 – close up of exit point on eastern gable of granary building

Photo 24 – ground floor of granary building used for storage. Wooden loft floor above

Photo 25 - ground floor of granary building used for storage. Wooden loft floor above

Photo 26 – western elevation of granary building showing exit point used by Brown long-eared bats through upstairs window

Photo 27 – rear elevation and western gable of granary

Photo 28 – thermal camera trained on rear and western gable of granary

Photo 29 – lower building attached to granary with swallows' nests on roof timbers

Photo 30 – swallows' nests on roof timbers of lower building

Photo 31 – some scattered bat droppings of Brown long-eared bat in lower building

Photo 32 – roof of granary – half bitumen felt lining and half breathable membrane

Photo 33 – thermal photo of western elevation of dwelling house

Photo 34 – Thermal photo of rear and western elevation of granary

Trees


Photo 35 – garden area to west of dwelling house where Soprano pipistrelles and Brown long-eared bats were recorded foraging at dusk and dawn

Photo 36 – garden area to west of dwelling house where Soprano pipistrelles and Brown long-eared bats were recorded foraging at dusk and dawn

Photo 37 – treeline to rear of granary where Brown long-eared bats were recorded foraging at dusk and dawn

Photo 38 – treeline to rear of granary where Brown long-eared bats were recorded foraging at dusk and dawn

Photo 39 – trees to front of dwelling house where Soprano pipistrelle bats were recorded foraging at dusk and dawn

Photo 40 - two mature beech trees to east of dwelling house. No bats recorded roosting in these trees

Photo 41 – tree line to east of field to east of house.

Photo 42 – tree line to east of field to east of house.

Photo 43 – tree line to north east of dwelling house. No bat roosts were detected in any trees on site

APPENDIX
Purpose-built bat houses

Building constructed with concrete blocks, slate roof, wooden facias and soffits. Slates lined internally with bitumen felt.

Bat bricks also built into structure

Bat brick dimensions - W 20 x H 47.5 x D 12.5 cm.

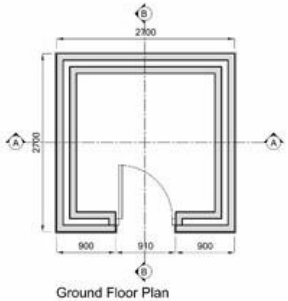
Pump house type roost with natural slate roof lined with bitumen felt

Notes:

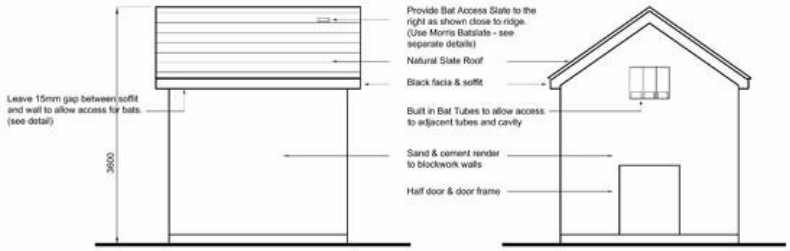
The "Blundell Bat House" design was developed by Brian McDonald and Ricky Whelan of Offaly County Council and is based on an adapted version of the Vincent Wildlife Trust (Lesser horseshoe bat) Bat House design. The design was further developed with advice from Ruth Hanniffy Biodiversity Officer with Sligo County Council, Dr Caroline Sheil of Bat Conservation Ireland and Kate McAney of The Vincent Wildlife Trust. Bat specialist Dr Tina Aughney reviewed the draft designs and added further technical specifications based on her experience surveying and designing similar structures.

The structure is designed to provide roosting opportunities for common bat species in Ireland who sometimes depend on mam-made structure for roosting. It is designed to allow access to bats but limit access to nesting birds and other species that may negatively impact on roosting bats. The robust design affords the structure some defence to the challenges of any unwanted interference.

The position has been selected in the context of the site and its immediate and wider habitats and connectivity to the greater countryside (via he grand canal corridor).

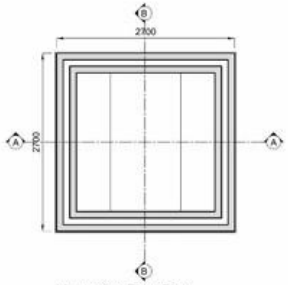


Ground Floor Plan

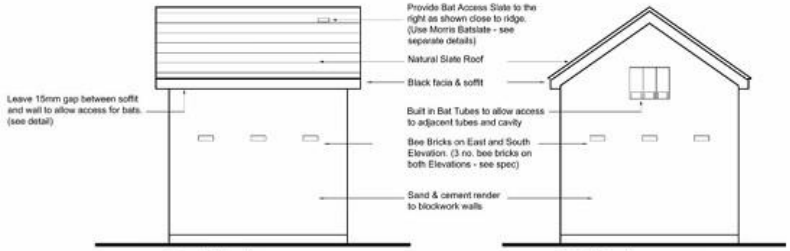


North Elevation

West Elevation

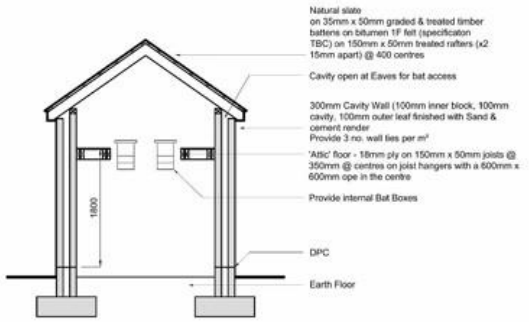


Mezzanine Floor Plan

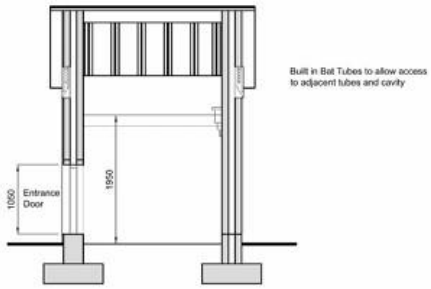


South Elevation

East Elevation



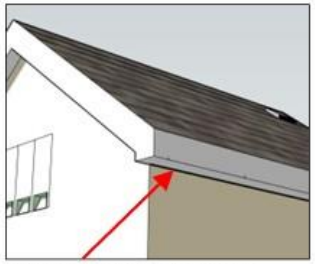
Section A-A



Section B-B

Example of Morris Batslate

Notes:
- Recommend Schwegler Bat Tube Dim W 20 x H 47.5 x D 12.5 cm.
- Bricks 4 Bees Bee Brick Dim W 21.5 x D 10.25 x H 6.5 cm
- Use Morris Batslate - see separate details.



Leave 15mm gap between soffit and wall to allow access for bats.