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BAT SURVEY REPORT

for

PROPOSED NEW DWELLING

(Planning ref. no.: NA201449)

ARDSALLAGH LANE ARDSALLAGH, NAVAN

CO. MEATH

On behalf of

Peter & Niamh McLoughlin

JULY 2025

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1 INTRODUCTION

1.1 Overview

Gannon + Associates were commissioned by Peter and Niamh McLoughlin to carry out bat survey works in regards to the proposed new dwelling at Ardsallagh Lane, Ardsallagh, Navan, Co. Meath. The site comprises an existing bungalow which will be demolished to facilitate the new dwelling.

The proposed development received a grant of planning from Meath County Council on 13th May 2021. Item 2 of the Schedule of Conditions included the following:

"A bat survey shall be carried out by a suitably qualified ecologist during the active bat season (1st March to 31st August). Any destruction of bat roosting site(s) shall be carried out under licence issued by the Wildlife Licence Unit of the National Parks and Wildlife Service".

This report details the methodology and results of bat surveys undertaken at the proposed development site in relation to Item 2 of the Schedule of Conditions outlined above. The proposed development broadly comprises the demolition of the existing bungalow and the construction of a replacement 1.5 storey dwelling, a detached domestic garage, de-commissioning of the existing septic tank and the upgrade to a new wastewater disposal system, and all associated site works and services.



FIGURE 1. EXISTING BUNGALOW WITHIN PROPOSED DEVELOPMENT SITE.

1.2 Statement of Competency

This report has been prepared by Donnacha Woods M.Sc. B.Sc. ACIEEM. Donnacha is an Associate member of CIEEM and has over 10 years' experience working as an ecologist in both private consultancy and NGO sectors. Donnacha holds a B.Sc. in Zoology from University College Dublin and a M.Sc. in Biodiversity and Conservation from Trinity College. He has worked on a wide range of projects both at home and overseas and has significant experience carrying out bat surveys and assessments in Ireland. He also holds a Diploma in Environmental Impact Assessments from Portobello Institute and a Certificate in Wild Plant Identification from IT Sligo.

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2 LEGISLATION

All bat species in Ireland, and their roost sites, are protected under the following national and international legislation:

- Wildlife Act (1976) & Wildlife (Amendment) Act 2000;
- EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Directive 92/43/EEC), i.e. the 'Habitats Directive';
- The Convention on the Conservation of European Wildlife and Natural Habitats, i.e. the 'Berne Convention'; and
- The Convention on the Conservation of Migratory Species of Wild Animals, i.e. the 'Bonn Convention'.

Under Section 23 of the above listed Wildlife Acts (1976-2000) it is offence to wilfully interfere with or destroy the breeding or resting place of any bat species. The provisions of Section 23 state that it is an offence to:

- Intentionally kill, injure or take a bat;
- Possess or control any live or dead specimen or anything derived from a bat;
- · Wilfully interfere with any structure or place used for breeding or resting by a bat; and
- Wilfully interfere with a bat while it is occupying a structure or place which it uses for that purpose.

In view of their sensitive status across Europe, all species of bat have been listed on Annex IV of the EC 'Habitats Directive' and some, such as the lesser horseshoe bat, are given further protection and listed on Annex II of this Directive. This Directive was transposed into Irish law as the European Communities (Natural Habitats) Regulations, 1997, and combined with the Wildlife Acts (1976-2016), ensures that individual bats and their breeding sites and resting places are fully protected.

A list of bat species known to occur in Ireland is given in Table 1. This includes nine resident species and two vagrant species, which have only been recorded on a single or handful of occasions in Ireland.

TABLE 1. STATUS AND DISTRIBUTION OF BAT SPECIES IN IRELAND.

| Species | Conservation Status (NPWS, 2019) | Occurrence in Ireland | Distribution in Ireland (McAney, 2006) |
|---|-------------------------------------|--------------------------|---|
| Common Pipistrelle (Pipistrellus pipistrellus) | Favourable | Resident | Widespread |
| Soprano Pipistrelle (Pipistrellus pygmaeus) | Favourable | Resident | Widespread |
| Nathusius' Pipistrelle (Pipistrellus nathusii) | Unknown | Resident | Widespread |
| Leisler's Bat (Nyctalus leisleri) | Favourable | Resident | Widespread |
| Brown Long-eared Bat (Plecotus auritus) | Favourable | Resident | Widespread |
| Brandt's bat (Myotis brandtii) | Data deficient | Vagrant | Handful of records from counties Wicklow, Clare and Kerry |
| Daubenton's Bat (Myotis daubentonii) | Favourable | Resident | Widespread |
| Whiskered Bat (Myotis mystacinus) | Favourable | Resident | Widespread |
| Natterer's Bat (Myotis nattereri) | Favourable | Resident | Widespread |

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| Greater Horseshoe Bat (Rhinolophus ferrumequinum) | n/a | Vagrant | One existing record from Co. Wexford |
|--|------------|----------|---|
| Lesser Horseshoe Bat (Rhinolophus hipposideros) | Inadequate | Resident | West of Ireland |

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3 METHODOLOGY

3.1 Roost Inspection Survey

A roost inspection surveys was carried out of the existing dwelling on-site by a qualified ecologist with Gannon + Associates on 3rd June 2025. The survey was carried out in-line with the best practice methods outlined in the Bat Conservation Trusts "*Bat Surveys for Professional Ecologists*", 4th edition (Collins, 2023).

A thorough search of the dwelling was conducted during daylight hours and included both the exterior and interior of the building. The survey involved a search for evidence of bat presence within the buildings, including, but not limited to:

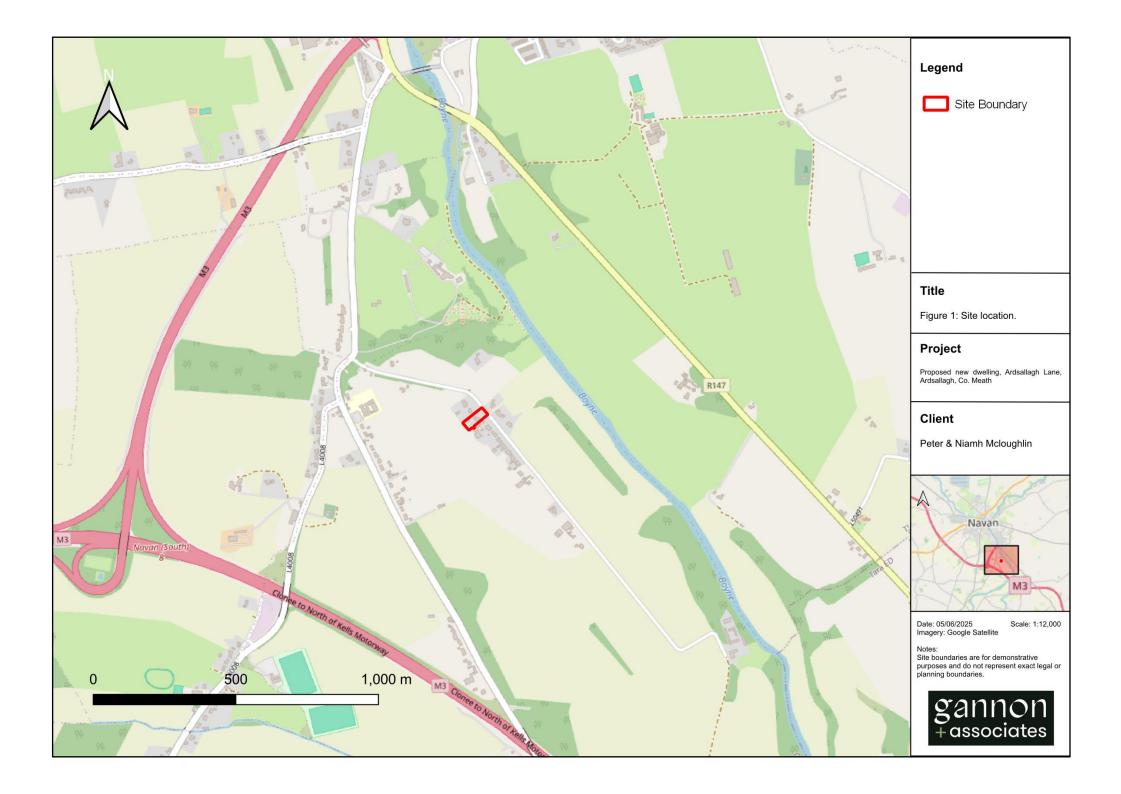
- Droppings;
- Fur-oil stains and scratch marks,
- Dead specimens;
- Urine splashes;
- Prey items (moth/butterfly wings etc.); and
- Audible squeaking.

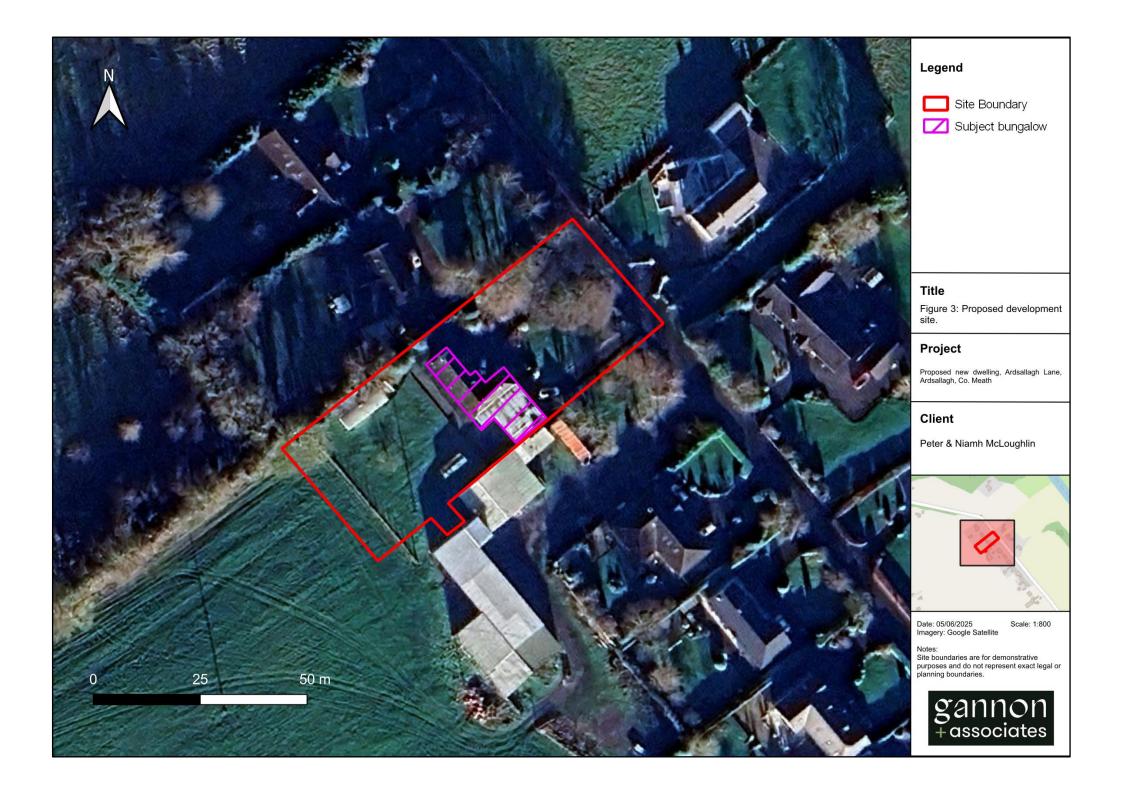
3.2 Emergence Survey

A dusk emergence survey was carried out on the subject building by Gannon + Associates on 3rd June 2025 using direct observation and handheld bat detectors (both heterodyne and full-spectrum). The purpose of the emergence survey was to determine the presence of roosting bats in the structures via the direct detection of emerging bats post-sunset. The survey focussed on any potential entry/exit points identified during the roost assessment survey.

The survey followed the best practice methods outlined in the Bat Conservation Trusts "Bat Surveys for Professional Ecologists" (Collins, 2023). The survey commenced c.15 minutes prior to sunset and concluded c.2 hours post-sunset. Temperatures were mild, ranging from c.13 - 11°C with light winds and no precipitation. Any bats detected emerging from the structure were recorded on field sheets and maps, as was any general bat activity in the immediate area.

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4 RESULTS

4.1 Roost Inspection Survey

The roost inspection survey comprised a thorough assessment of the exterior and interior of the subject dwelling for evidence of the presence of roosting bats and/or any potential to support roosting bats.

The building within the proposed development site comprises a bungalow and various extensions. The original section of the building is a single storey cottage, likely dating from early to mid-20th century. There is a flat roofed extension to the south elevation, and a pitched roof extension to the north elevation.



FIGURE 4. REAR OF DWELLING SHOWING EXTENSIONS.





FIGURE 5. ATTIC SPACES OF NORTHERN EXTENSION AND ORIGINAL COTTAGE.

The subject building was thoroughly searched for any evidence of roosting bats. This included, but was not limited to, the following areas:

- External bricks, plaster, soffits, facia boards etc. for grease stains and scratch marks;
- External paving/hardstanding, windowsills and internal floors, walls, stairs, furniture and attic space (where accessible) for bat droppings;

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- Where possible in suitable crevices for live bats;
- Walls and corner areas for perching stains and scratch marks;
- In toilets, sinks and other areas of standing water for dead bats; and
- Attic, floors and surfaces for discarded moth and butterfly wings.

A number of bat droppings consistent with pipistrelle-type droppings were recorded in the attic space of the northern pitched roof extension. These were located on the rear of the attic hatch, with some other scattered droppings noted in the immediate vicinity. It is noted that new insulation was installed in the attic in recent years. While it is possible that further bat droppings were present underneath this insulation, no notable collection of droppings were recorded on top of this insulation which has been in place for a number of years.



FIGURE 6. BAT DROPPING RECORDED ON REAR OF ATTIC HATCH.

4.2 Emergence Survey

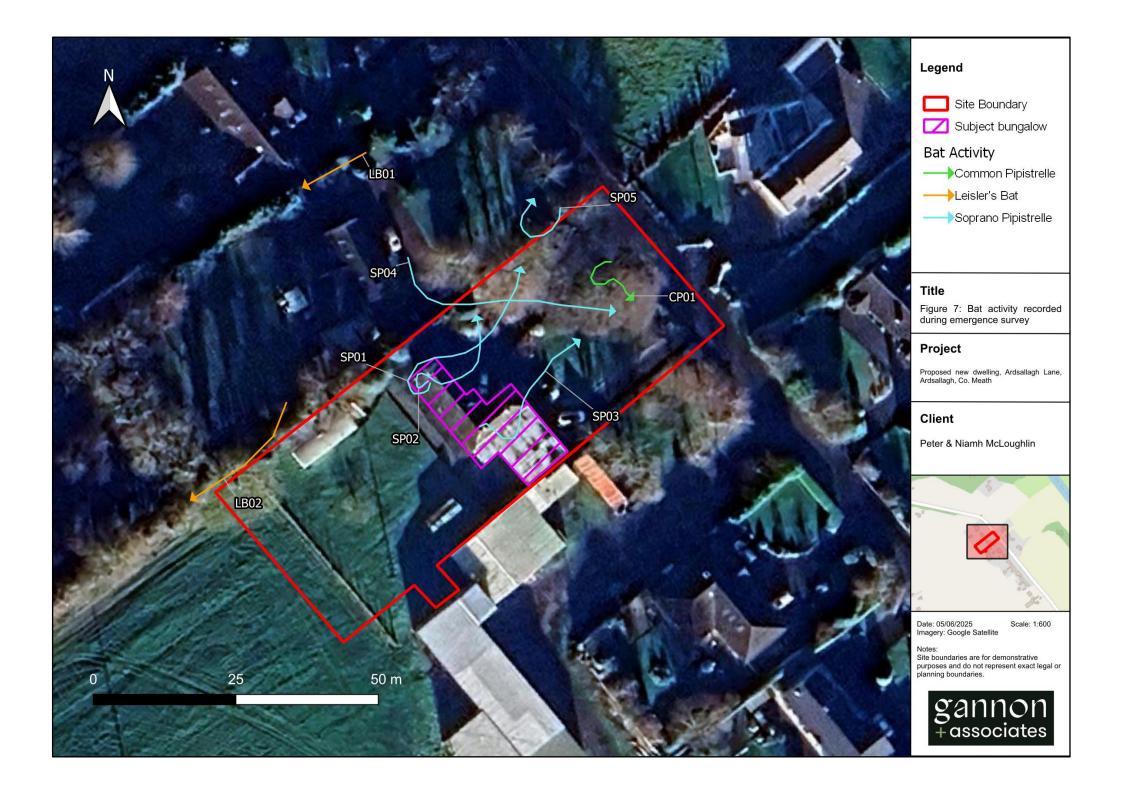
Three soprano pipistrelles were recorded likely emerging from the subject dwelling. Some incidental bat activity was also recorded within the surrounding area during the surveys. Survey results are outlined below and shown in Figure 7.

3rd June 2025

Sunset: 21:48 Temperature: 13-11°C Precipitation: None Wind: Light breeze

The first observation comprised a soprano pipistrelle at 6-minutes post-sunset emerging from the northern extension of the subject dwelling (Ref: SP01 – see Figure 7 below). The bat was seen by a surveyor situated on the eastern side of the building coming up over the roof from the vicinity of the chimney. At 16-minutes post-sunset a soprano pipistrelle was similarly recorded coming up from roof in this same location (SP02). A Leisler's bat was observed north of the proposed development site at 21-minutes post-sunset (LB01). At 24-minutes post-sunset a soprano pipistrelle was observed coming up from roof at the central cottage part of the building (SP03). Shortly after this, as 26-minutes post-sunset, a soprano pipistrelle was observed coming from north of the proposed development site and foraging through vegetation (SP04). The remaining observations during the survey comprised a Leisler's bat at 45-minutes post-sunset seen over trees to the west (LB02), a common pipistrelle at 60-minutes post-sunset foraging in the front garden area (CP01) and a soprano pipistrelle at 68-minutes post-sunset similarly in foraging in the vicinity of the front garden area (SP05).

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5 MITIGATION MEASURES

5.1 Description

The proposed development includes the removal of the existing building on-site and construction of a new dwelling. This will result in the loss of the recorded soprano pipistrelle roost within this dwelling. Three bats were recorded emerging from this roost during the survey on 3rd June 2025.

Given the low number of bats recorded emerging, this is not considered to be a maternity roost. However, the loss of this roost, in the absence of mitigation, would constitute a minor negative impact to local soprano pipistrelle population.

5.2 Mitigation Measures

Removal of roosting habitat during demolition

The removal of the building on-site will be required in order to facilitate the proposed development. This includes the soprano pipistrelle bat roost within the attic space of the existing bungalow.

A derogation licence is therefore required from the National Parks and Wildlife Service (NPWS) for the demolition of this building.

Mitigation measures¹ are proposed below to minimise the impact of this demolition where possible.

- The demolition of the existing dwelling should be undertaken outside of the main period for roost usage where possible (i.e. outside of April to September);
- Should the demolition be undertaken during the active bat season (March/April September/October) it should be immediately preceded by a bat emergence survey to determine whether any bats are still utilising the structure;
- Should bats be recorded emerging they will require exclusion from the building (i.e. blocking of
 entry/exit points once bats have emerged). Physical removal by hand by a suitably qualified bat
 specialist may be required should exclusion not be possible. In this instance bats will be placed
 in a bat box for release on the evening after capture;
- A qualified ecologist and/or the local NPWS conservation officer will be present to oversee the demolition of the subject building; and
- Where possible, the roof will be removed first, and the structure left for a minimum of 24 hours in order to facilitate any potential bats still present to exit the structure.

Provision of roosting habitat

New roosting habitat is proposed to mitigate for the loss of the existing bungalow. The proposed development and site were examined for the optimum scenario, with preference for 'like-to-like' roosting habitat (i.e. an attic space within a structure), over typical bat boxes. The proposed development includes the construction of a Garage building to the rear of the main dwelling. This structure includes an attic space (see Figure 7 below).

It is proposed to install two bat access tiles / vents² on the south-eastern side of the pitched roof. This will allow the attic space of the new Garage building to be accessed by bats and will mitigate the loss of roosting habitat as a result of the demolition of the existing bungalow.

The roofing felt to be installed in the proposed Garage attic space should be 1F Bitumen felt or similar 'bat friendly' membrane, as this material does not contain polypropylene filaments that can trap bats. If

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¹ Note: Mitigation measures will be agreed with the NPWS as part of the derogation licence application and may therefore be subject to change.

² E.g. The available 'Habibat', 'Just Lead', 'Beddoes', 'Leadworx' bat access tiles or product of similar design and function.

treatment of timbers is proposed in the construction of the roof, then pre-treated timbers should be used where possible.

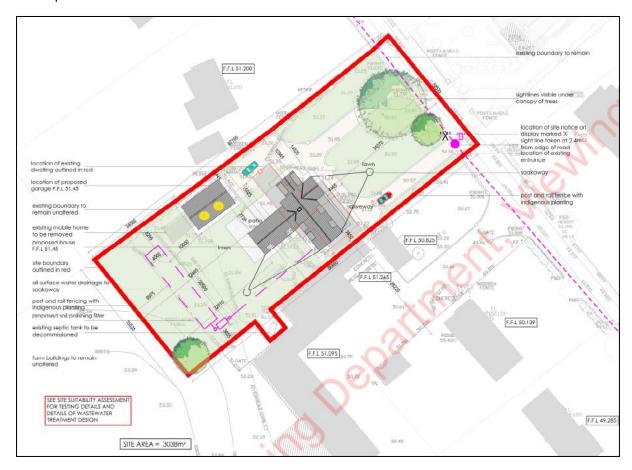


FIGURE 7. SITE LAYOUT PLAN SHOWING GARAGE LOCATION TO NORTH-WEST OF NEW DWELLING (APPROXIMATE LOCATION OF PROPOSED ACCESS SLATES/TILES SHOWN AS YELLOW DOTS).

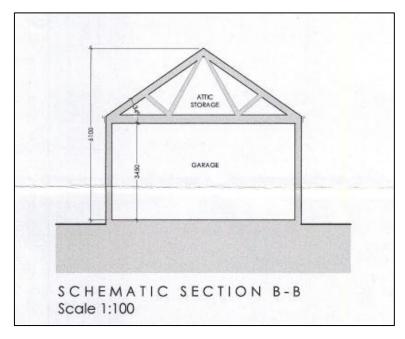


FIGURE 8. SECTION OF PROPOSED GARAGE BUILDING SHOWING ATTIC SPACE.

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FIGURE 9. EXAMPLE BAT ACCESS TILES / VENTS (JUST LEAD, BEDDOES).

Monitoring

A suitably qualified ecologist will assess the Garage building to ensure the required works have been carried out in order to create suitable habitat for roosting bats, i.e. to confirm the installation of the bat access tiles/vents, roofing felt characteristics, timber treatment etc., as outlined above). The assessment confirming suitability will be included in the derogation licence return.

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6 DEROGATION LICENCE APPLICATION

Surveys undertaken at the proposed development site recorded three soprano bats emerging from the existing bungalow on-site. Gannon + Associates, on behalf of Peter & Niamh McLoughlin, are therefore applying for a bat derogation licence in relation to the demolition of this bungalow.

The NPWS document, Guidance on the Strict Protection of Certain Animal and Plant Species under the Habitats Directive in Ireland - National Parks and Wildlife Service Guidance Series 1 (2021), was reviewed before undertaking this derogation application. Article 16 of the Habitats Directive sets out three pre-conditions, all of which must be met before a derogation from the requirements of Article 12 or Article 13 of the Directive can be granted. These preconditions are also set out in Regulation 54 of the Regulations.

The preconditions are:

- 1. A reason(s) listed in Regulation 54 (a)-(e) applies
- 2. No satisfactory alternatives exist
- 3. Derogation would not be detrimental to the maintenance of a population(s) at a favourable conservation status.

It is believed that the pre-conditions for granting a derogation licence have been met, as follows:

Test 1 - Reasons for Seeking Derogation

Regulation 54(2) (a)–(e) states that a derogation licence may be granted for five reasons listed (a) to (e). We are of the opinion that the following reasons apply:

(c) In the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment.

This application for derogation qualifies under Regulation 54(2)(c) of the European Communities (Birds and Natural Habitats) Regulations as the proposed development is required to fulfil a housing need and, as such, is of overriding public interest of a social nature in light of the current housing crisis in Ireland. The new dwelling will provide housing to two generations of a family.

The proposed development was granted permission by Meath County Council on 13th May 2021. The proposed development comprises the removal of an existing bungalow and extensions and replacement with a new dwelling. A small (3no.) soprano pipistrelle roost was recorded during surveys carried out in June 2025, however a licence is requested to demolish the dwelling and effectively remove the roosting place identified.

The existing bungalow and extensions are in poor repair and not suitable for the needs of the applicants. The proposed development will provide housing for two generations of a family. In the absence of the proposed development, the existing bungalow will be left idle and will degrade. This will result in the removal of one unit from the housing stock of the local area and housing for two generations of a family, when retainment and provision of new housing units is in critical need. The Meath County Development Plan sets out a housing target for 2026 of 90,000 units. The proposed development is therefore of overriding public interest in relation to the housing crisis. The provision of one unit of housing, which will accommodate two generations of a family, will contribute towards alleviating the strain of lack of housing in the area, and will contribute towards the housing targets as set by Meath County Council and government policy.

In addition, the existing wastewater treatment system at the site is inadequate, with potential associated impacts on water quality. This system is be replaced as part of the proposed development with associated beneficial consequences for the environment.

Test 2 - There is no Satisfactory Alternative

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There are no satisfactory alternatives to the demolition works to allow for new development.

<u>Do nothing scenario</u>: As detailed above, the existing bungalow and extensions are in poor repair and not suitable for the needs of the applicants. In the absence of the proposed development, the existing bungalow will be left idle and will degrade. This will result in the removal of one dwelling from the housing stock of the local area, when retainment and provision of new housing units is in critical need. The future continued degradation of the existing bungalow would likely render the existing roosting habitat unsuitable in the long-term, therefore resulting in the loss of suitable roosting habitat for bats. In addition, the existing wastewater treatment system at the site is inadequate, with potential associated impacts on water quality. This option is not a satisfactory alternative.

Renovation of existing bungalow: The potential for the renovation of the existing bungalow was considered. The roof of the existing bungalow is in poor condition. The renovation of the existing bungalow would include works to the roof and attic space. This would include the replacement of the roof in order to raise the elevation of the building and also to comply with the Building Regulations 1997 to 2022. These works in themselves would require the removal and alteration of the attic space and identified bat roost. The renovation of the existing bungalow would not be suitable for the needs of the applicants, where two generations of a family are to reside, and is therefore not a satisfactory alternative.

Retention of existing bungalow and construction of new dwelling within same site: The potential for the retention of the existing bungalow and the construction of a new dwelling on the same site was considered. Planning permission has already been granted for the demolition of the existing bungalow and the construction of a new dwelling at the site. This option would be contrary to the grant of planning. The retention of the existing bungalow and the construction of a new dwelling is not feasible within the existing site due to the size of the site and location of the existing dwelling within the site. Furthermore, this option would be contrary to Meath County Development Plan in relation to site access, visual impact and density, and the new dwelling would be contrary to the Meath Rural Design Guide in due to the placement within the site that would be required under this option. This option is not a satisfactory alternative.

<u>Chosen option</u>: Replacement of the existing bungalow with a new dwelling and a separate Garage building with dedicated attic space designed for roosting bats (as outlined in Section 5.2 above). This will ensure the provision of suitable, stable roosting habitat at the site into the long-term to the benefit of local bat populations.

Test 3 - Favourable Conservation Status

As stated in the above NPWS document, 'Annex IV species must be maintained at Favourable Conservation Status or restored to favourable status if this is not the case at present. The net result of granting a derogation licence must be neutral or positive for the species in question'.

A small soprano pipistrelle roost was recorded in the subject building (3no. bats). A small number of droppings were recorded within the attic of the building during the roost inspection survey. Evidence of survey results show the structure does not contain a significant roost (i.e. a maternity roost).

The national soprano pipistrelle population is considered to be significantly increasing (Aughney *et al.*, 2023). The overall trend for the national population of soprano pipistrelle in Article 17 reporting (NPWS, 2019) is as follows:

- Range = Favourable
- Population = Favourable
- Habitat for species = Favourable
- Overall Assessment of Conservation Status = Favourable
- Overall trend in Conservation Status = Improving

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Mitigation measures have been designed in respect to the demolition works to ensure that there will be no negative impacts to potential roosting bats as a result of the proposed development (as detailed in Section 5 above). An alternative roosting habitat will be provided in the proposed Garage building via bat access to attic space and construction material requirements, which will provide roosting opportunities to a range of bat species. No significant impacts are anticipated on the local population of soprano pipistrelle bats.

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7 CONCLUSION

A bat roost assessment and dusk emergence survey were carried out on the existing bungalow within the proposed development site in June 2025 in order to determine the presence of roosting bats. A small soprano pipistrelle roost was recorded in the subject building (3no. bats). A derogation licence from the NPWS is therefore being applied for in relation to the demolition of this building. Incidental bat activity was also recorded in the immediate area, comprising three species - common pipistrelle, soprano pipistrelle and Leisler's bat. Mitigation measures have been proposed to reduce / eliminate any potential impacts. Provided all mitigation measures are adhered to, the proposed development will not result in any significant impacts to local bat populations.

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