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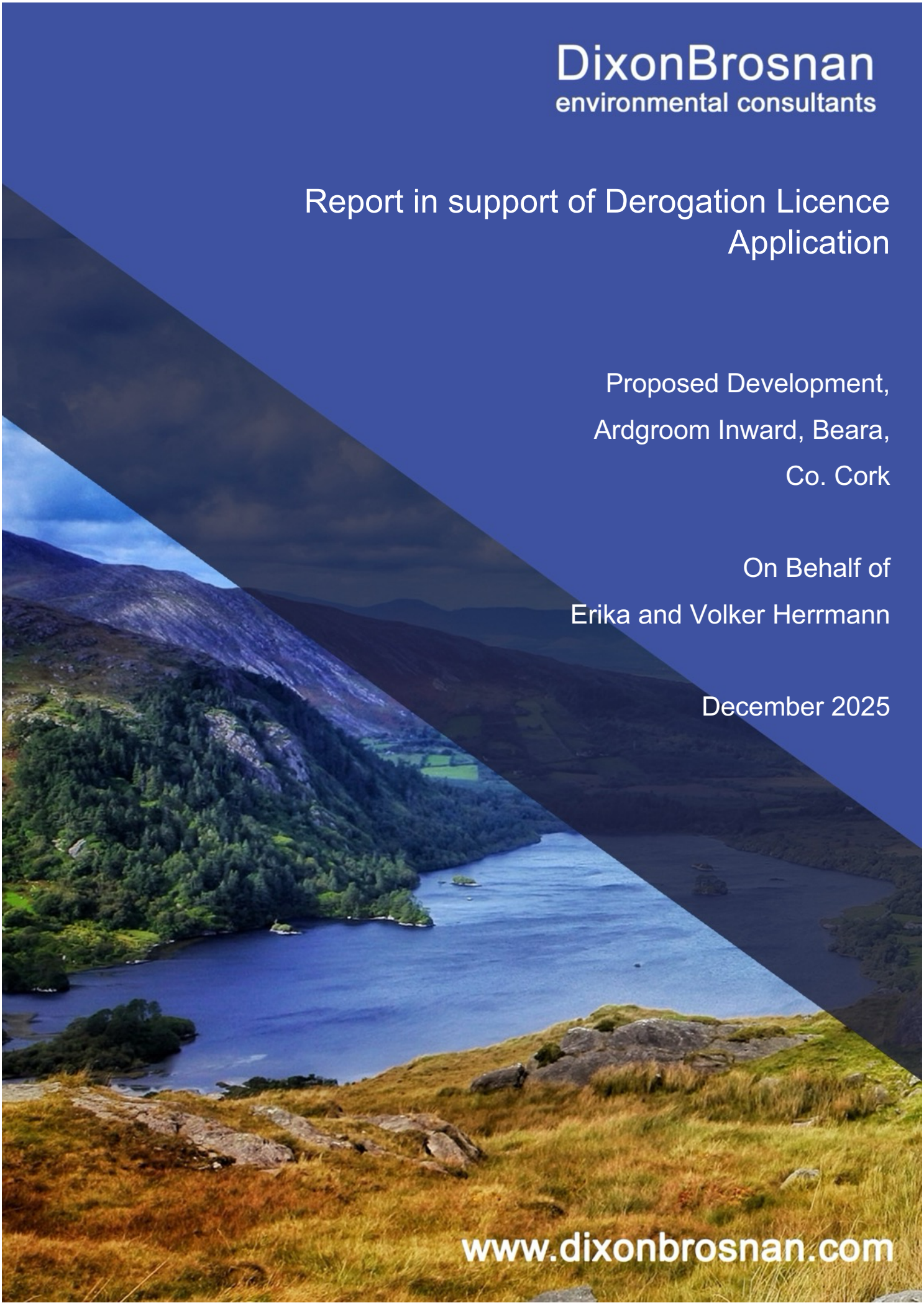
Report in support of Derogation Licence Application

Proposed Development,
Ardgroom Inward, Beara,
Co. Cork

On Behalf of
Erika and Volker Herrmann

December 2025



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Project	Report in support of Derogation licence application Proposed Development, Ardgroom Inward, Beara, Co. Cork	
Client	Erika and Volker Herrmann	
Project Ref.	25112	
Report No.	25112.01	
Client Ref.	-	
Date	**Revision**	**Prepared By**
21/11/25	Issue to client	Carl Dixon BSc MSc
04/12/25	Issue to client (2)	Sorcha Sheehy BSc PhD

DixonBrosnan Lios Ri Na hAoine, 1 Redemption Road, Cork.

[redacted] www.dixonbrosnan.com

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1. Introduction

DixonBrosnan were commissioned to undertake bat surveys at the site of the proposed development at Ardgroom Inward, Beara, Co. Cork. This surveys were in support of a planning application for a development which was subsequently granted planning (Cork County Council 2377).

Detailed bat surveys in 2022, 2024 and 2025 confirmed that a number of bat species are roosting within the proposed development site. As part of the proposed development, works are required to two buildings which are being used by roosting bats (a farmhouse (Building 1) and a garage (Building 4) See **Figure 3**). As part of the mitigation measures for this development, an old stone shed (Building 3) will be used to provide an alternative bat roost. Therefore, this derogation application is for works to three buildings i.e. Buildings 1, 3 and 4.

In line with the relevant guidance detailed below, a derogation licence is sought for the works. This derogation licence application has been compiled by Dr. Sorcha Sheehy (Ecology/ornithology). Bat survey work was completed in May 2024 and September 2025 by Carl Dixon MSc (Ecology/Ecological monitoring). Survey work was carried out at the site by Dr. Tina Aughney in July 2022.

Carl Dixon holds an Honours Degree (BSc) in Ecology and a Masters (MSc) in Ecological Monitoring from UCC. He is a senior ecologist who has over 25 years' experience in ecological assessment. Prior to setting up DixonBrosnan Environmental Consultants in 2000, Carl set up and ran Core Environmental Services which included REPS planning for landowners and ecological assessments. Carl has particular experience in freshwater ecology, including electrofishing fish stock assessments and water quality assessments. He also has considerable experience in habitat mapping and mammal ecology including survey work and reporting in relation to Badgers and bats. Other competencies include surveys for invasive species and bird surveys. Carl has extensive experience with regards to EIAR and NIS mitigation and impact assessment. He has experience in large-scale industrial developments with extensive experience in complex assessments as part of multi-disciplinary teams. Such projects include gas pipelines, incinerators, electrical cable routes, oil refineries and quarries.

Dr. Sorcha Sheehy PhD (Ecology/ornithology) is an ecologist and ornithologist who has worked for 15 years in environmental consultancy. She has worked on Screening/NISs for a range of small and large-scale projects with expertise in assessing impacts on birds. Sorcha's PhD research focused on bird behaviour at airports, where she studied bird avoidance behaviour and collision risk to aircraft. Her research involved field observations, post-mortem analysis and radar surveys. Sorcha has worked on bird collision risk assessments at airports throughout Ireland including Dublin airport, Cork airport, Shannon airport and Kerry airport. During her consultancy work Sorcha carried out field-based surveys and environmental reports including NIS, AA screening and EIARs. Notable projects include the Arklow Bank Wind Park, Indaver Ireland Waste Management Facility at Ringaskiddy, Irving Oil Whitegate Refinery (IOWR), Shannon LNG and Greenlink Interconnector.

Dr. Aughney has worked as a Bat Specialist since 2000 and has undertaken extensive survey work for all Irish bat species including large scale development projects, road schemes, residential developments, wind farm developments and smaller projects in relation to building renovation or habitat enhancement. She is a monitoring co-ordinator and trainer for Bat

Conservation Ireland. She is a co-author of the 2014 publication Irish Bats in the 21st Century. This book received the 2015 CIEEM award for Information Sharing. Dr. Aughney is a contributing author for the Atlas of Mammals in Ireland 2010-2015.

2. Background

The proposed development site is located at Ardgroom Inward on the Beara Peninsula. The site is located on the edge of the Cleanderry Woods SAC (**Figure 1**).

The development, granted planning by Cork Council in 2023 (Ref 2377) is for the following:

Demolition of single storey rear extension, refurbishment of existing farm house with new dormer window to the rear roof and new photovoltaic panels to front roof, construction of a single storey extension to the side, construction of a separate garden room/gym, a new wastewater treatment system, re-roofing and repairs to existing garage, alterations to existing stone shed and associated site works at farm house. An Ecological Impact Assessment report and a Natura Impact Statement are included with the application at Ardgoom Inward, Beara, Co. Cork, P75F342.

Details of the proposed works are shown in **Figure 2**. An aerial view/photograph of the Buildings within and adjacent to the site boundary are included in **Figure 3**. It is noted that planning permission (Planning reference 2427) has also been granted for work to the adjacent property (Building 2 in **Figure 3**). These works do not form part of this derogation application. The works to Building 2 will avoid direct impacts on the bat roost and therefore, no derogation licence is required for these works.

Figure 1. Proposed development site location | Source OSI

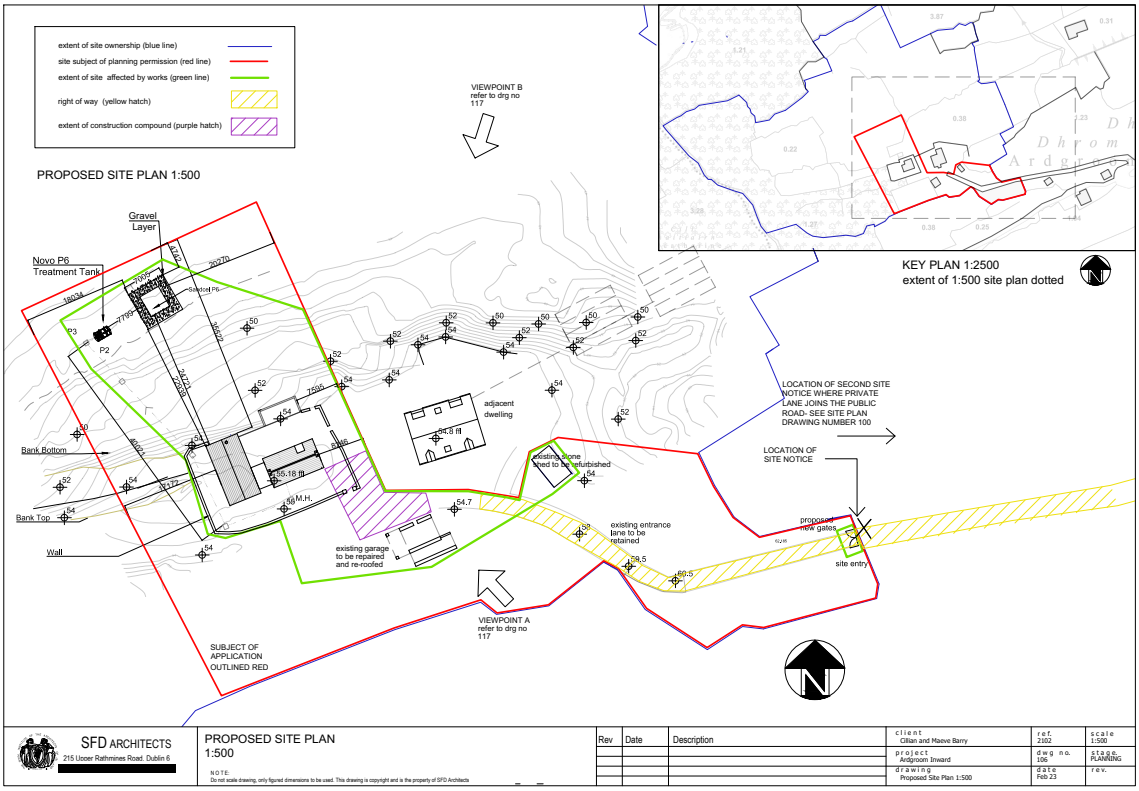

Figure 2. Site Layout plan | SFD Architects

Figure 3. Aerial view of site buildings (Buildings 1, 3 and 4 form part of derogation application)

3. Proposed development and details of works requiring derogation

The proposed development was granted planning by Cork County Council in 2023. This planning permission was received by Cillian and Maeve Barry. The property was subsequently purchased by Erika Herrmann. Erika Herrmann is applying for the derogation licence as required under the Under Regulation 54 & 54A of the European Communities (Birds and Natural Habitats) Regulations 2011, as amended.

Renovation works are required to Building 1 (farm house) and Building 4 (garage). (See **Figure 4** and **Figure 5**).

The proposed renovation works to Building 1 (Farm house) and Building 4 (Garage) will result in the loss of the following roosts:

- Day roost for soprano and common pipistrelles and night roost for lesser horseshoe bat, soprano pipistrelles and common pipistrelles.
- Day roost for Natterer's bat and night roost for lesser horseshoe bat.

The operation of the site will also increase human activity and therefore noise and lighting. This will also potentially impact on local bat populations.

The farmhouse (Building 1) and the garage (Building 4) which is proposed for refurbishment are in a state of disrepair, with continued deterioration recorded between 2022 and 2024 site surveys.

Table 1 is an extract from Table 9, Appendix 1 which indicates the location of the roosts within Buildings 1 and 4, the access points to these buildings and the species which use the buildings.

Table 1. Buildings and structures survey results

Building Code	Roost type & Location	Bat species (No. of bats)	Access Points
Building 1	Night roots (LHB) -hot press Day roost (SP, CP) – roof void	LHB Soprano pipistrelle (SP) x 1 Common pipistrelle (CP) x 1	LHB – open window at rear SP – facia/soffit of gable facing dormer bungalow
Building 3	Day roost (LHB) roof void Night roost (LHB) roof void Day roost (SP, CP) roof void	Concentration of surveying was undertaking in relation to Buildings 1 & 2. Details of roosts for this building relates to static info	Open windows and door
Building 4	Night roost (LHB) Day roost (Natterer's bat)	Use by Lesser Horseshoe bat as a night roost was strongly indicated by the 2025 data.	Gap over door

Building 1 Farmhouse

The proposed works to building 1 (as detailed in proposed development (Planning reference 2377), will involve upgrade works to the property which will include re-roofing of this building (See Figure 4). The farmhouse is currently unoccupied, which has allowed Lesser horseshoe bat to use the interior of the property, accessed via an open window. Any occupancy of the house (which means that windows would be opened/closed) would mean that access would be prevented and/or bats will not use the interior rooms when occupied and lit. Therefore, even in the absence of renovation works, the use of the interior or the property by Lesser horseshoe will not continue once the house is in use.

Upgrade works to Building 1 are required to the roof to weather proof and future proof the property. This means that the day roost for Common and Soprano pipistrelle, which is accessed via damaged facia/soffit, will no longer be accessible.

Building 4 Garage

Building 4 is garage where upgrade works have been permitted as per planning permission 2377. The proposed works are outline in **Figure 5**, which will include the addition of a timber/glass conservatory, repair and repointing of old stone walls, a new door and a new roof structure. Bat activity surveys indicate that Lesser horseshoe and Natterer's bat are roosting within the structure. Although the exact location of bat roosts within the structure although interior searches of the building could not identify the exact location (and number of individuals roosting).

In the absence of development (i.e. a do-nothing scenario), these buildings will continue to deteriorate and in the medium-long term are unlikely to provide roosting habitat for bats. Any occupancy of this building, even in the absence of development, will prevent bats from roosting within the interior of the building.

Building 3. Shed

As mitigation for the works proposed to Building 1 and Building 4, it is proposed to focus on Building 3 as an alternative bat roost. This building provided roosting space for three bat species (lesser horseshoe bat, common pipistrelle and soprano pipistrelle) and has crevices suitable for Natterer's bats. Therefore this building has the capacity to provided alternative roosting for the four species of bat likely to be impacted on the renovation works for Building 1 and Building 4.

The provision of Building 3 as a bat house will likely increase the roosting opportunities for lesser horseshoe bats, Natterer's bat and soprano pipistrelles.

Therefore, a NPWS Derogation Licence is required for renovation works on the Building 1, Building 3 and Building 4.

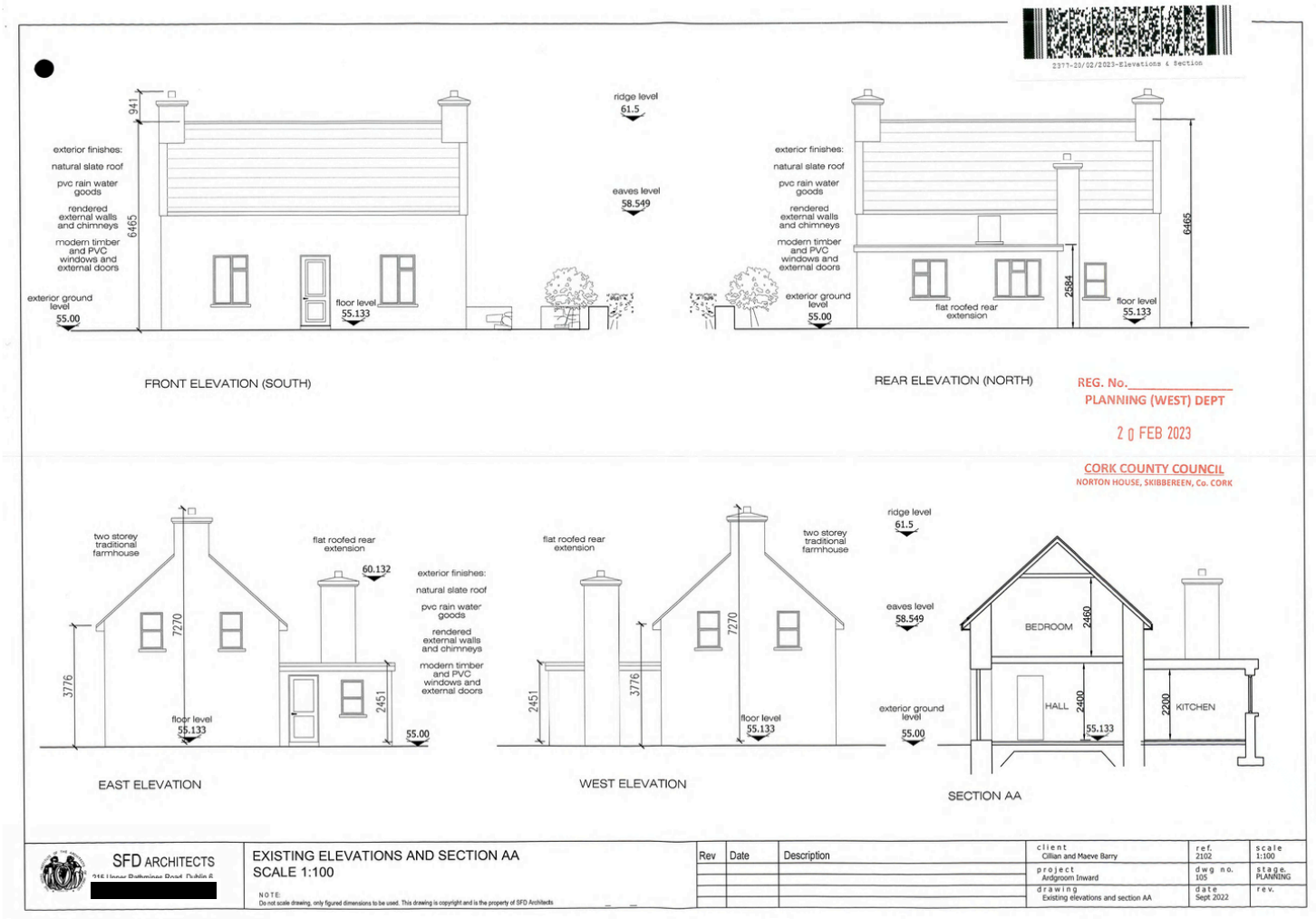

Figure 4. Proposed works to building 1 (farm house)

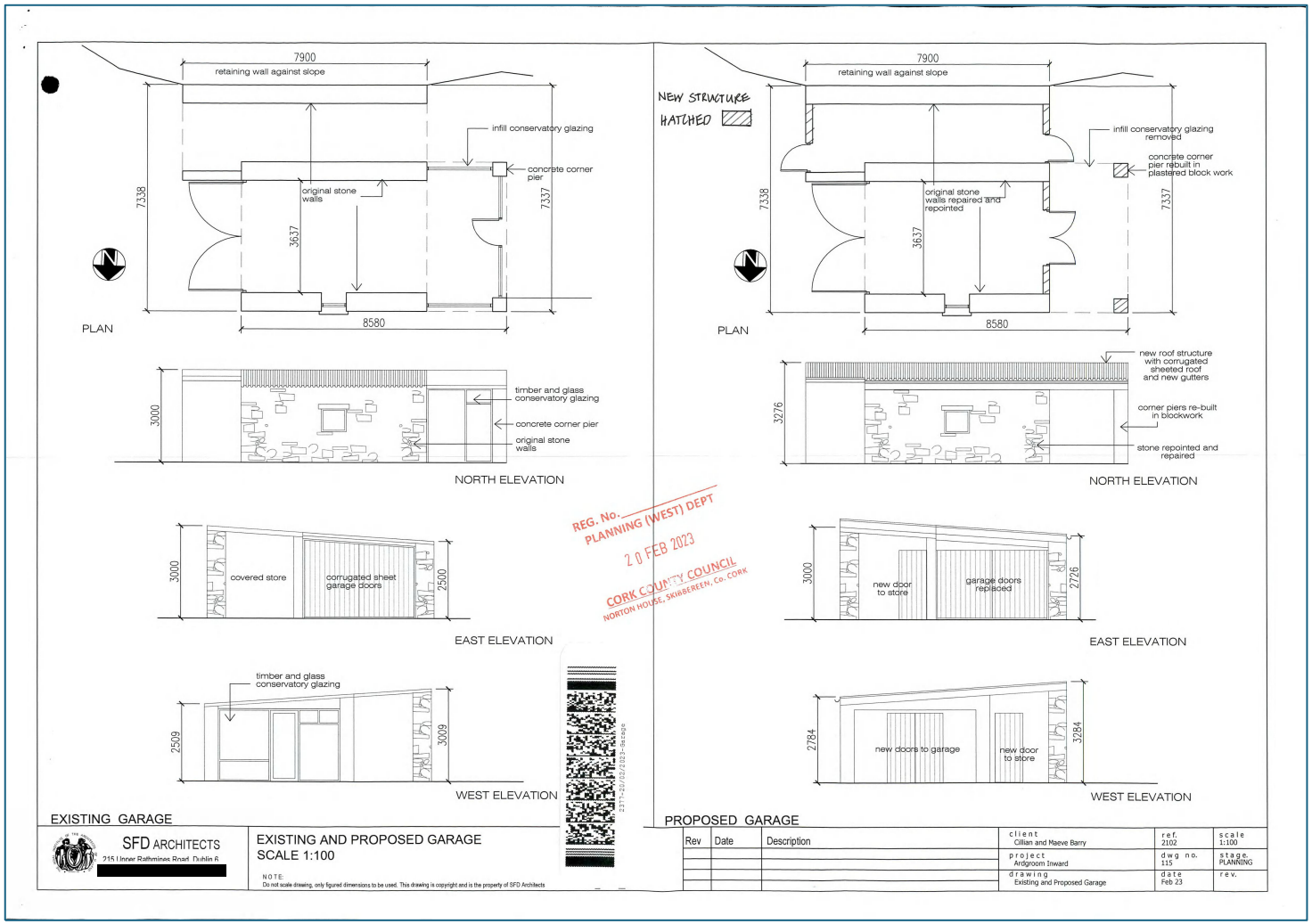

Figure 5. Proposed works to building 4 (garage)

4. Ecological survey and site assessment

Bat survey work has been carried out at this site over a number of years including 2022 (Dr. Tina Aughney) and 2024 (Carl Dixon). An update to this survey work was also carried out in 2025 (Carl Dixon). Full details of this surveys including dates, methodology, maps, equipment, weather etc are included in **Appendix 1**, **Appendix 2** and **Appendix 3** of this report.

The survey results as they relate to this derogation licence application are summarised below. The derogation licence will apply to Building 1 and 4 (as bats roosting habitat will be removed) and to Building 3, which requires work to create a long-term bat house. A maternity roost was recorded in Building 2 (in 2022, 2024 and 2025) which will not be impacted on by the proposed development and is not included in this derogation application.

Building 1 (farm house)

- Day roost for soprano and common pipistrelles and night roost for lesser horseshoe bat, soprano pipistrelles and common pipistrelles. The proposed renovation works for this building will prevent future use of the building by lesser horseshoe bats and will temporarily exclude usage by soprano and common pipistrelles.

Building 4 (Garage):

- Day roost for Natterer's bat and night roost for lesser horseshoe bat.

The proposed renovation works for this building will prevent future use of the building by lesser horseshoe bats and will temporarily exclude usage by Natterer's bats.

Building 3 (Shed)

Day roost and night roost for lesser horseshoe bat, soprano pipistrelles and common pipistrelles.

The provision of Building 3 as a bat house will likely increase the roosting opportunities for lesser horseshoe bats, Natterer's bat and soprano pipistrelles.

a) Lesser horseshoe bat

During the 2022, 2024 and 2025 surveys, this species was recorded night roosting in the hot press of Building 1 (bat droppings and level of bat passes indicated 1-2 individuals) and night roosting in the interior of Building 4 (level of bat passes indicated 1-2 individuals). Use by Lesser Horseshoe bat as a night roost was strongly indicated by the 2025 data. A higher level of bat passes for this species was recorded in Building 3. Surveys in 2024 and 2025 indicate that building 3 is used as a night roost by Lesser Horseshoe.

b) Soprano pipistrelle

This species was recorded day and night roosting in Building 1 & 4 (1-2 individuals) in 2022, 2024 and 2025. Surveys in 2024 and 2025 indicated that Soprano Pipistrelle was also roosting within Building 3.

c) Natterer's bat

This species was recorded roosting in the crevices of Building No. 4 in 2022. Brief signals for myotis bat (probably Natterers) in 2024 and 2025 indicate that this building may be used as a day roost for this species although data was not conclusive.

d) Common pipistrelle

Common pipistrelle was the most frequently encountered bat species. This species was recorded in small numbers in Buildings 1 and Building 4. A maternity roost was recorded in Building 2 (in 2022, 2024 and 2025) which will not be impacted on by the proposed development. Building 3 appears to be used a small day and night roost (based on 2024 and 2025 data).

5. Evidence of derogation tests

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 as follows:

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 population(s) at a favourable conservation status. It is believed that the pre-conditions for granting a derogation licence have been met, as follows.

5.1 Test 1 - Reasons for Seeking Derogation

Regulation 54(2) (a)–(e) states that a derogation licence may be granted for any of the reasons listed (a) to (e).

We are of the opinion that the following reason applies:

(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.

The proposed development is required to fulfil a housing need and, as such, is of public interest of a social and economic nature. The provision of a home supports social and economic development and, as such, outweighs the conservation interest of the bat species.

The proposed development site involved the refurbishment of an old farmhouse and garage in a rural area of Ardgroom. The farmhouse is unoccupied for several year and is running into a state of disrepair. The garage is also in a considerable state of disrepair. The proposed development is for the renovation of an existing farmhouse, therefore an alternative location is not a feasible option.

The farmhouse house (Building 1) and garage (Building 4) will be renovated and extended, to allow them to be used in the long-term.

In the absence of development, the house will fall into dereliction. It is noted that one of the Objectives for the Ardgroom area is the Cork County Development Plan 2022-2028 is as follows:

DB-05 Encourage the redevelopment/refurbishment of existing housing stock particularly vernacular dwelling.

It is proposed to focus on Building 3 as an alternative bat roost. This building provided roosting space for three bat species (lesser horseshoe bat, common pipistrelle and soprano pipistrelle) and has crevices suitable for Natterer's bats. Therefore this building has the capacity to provided alternative roosting for the four species of bat likely to be impacted on the renovation works for Building 1 and Building 4.

5.2 Test 2 - There is no satisfactory alternative

Alternative solutions considered included not renovating the farmhouse (i.e. 'do-nothing). However, that option is not feasible as the buildings will continue to fall into disrepair from ingress of rain and wind if nothing is done. Renovation works are required to make the dwelling habitable. The existing buildings has not been used for several years and if left unrepaired they may become beyond a reasonably proportionate cost to repair and renovate.

5.3 Test 3. - Impact of a derogation on Conservation Status

5.3.1 Impact on population status

a) Lesser horseshoe bat

During the 2022, 2024 and 2025 surveys, this species was recorded night roosting in the hot press of Building 1 (bat droppings and level of bat passes indicated 1-2 individuals) and night roosting in the interior of Building 4 (level of bat passes indicated 1-2 individuals). Use by Lesser Horseshoe bat as a night roost was strongly indicated by the 2025 data. A higher level of bat passes for this species was recorded in Building 3. Surveys in 2024 and 2025 indicate that building 3 is used as a night roost by Lesser Horseshoe.

Lesser horseshoe bat is an Annex II bat species under the EU Habitats Directive. The status of this bat species is listed as Least Concern. The national common pipistrelle population is considered to be significantly increasing (Aughney *et al.,* 2021).

The modelled Core Area for lesser horseshoe bat is a relatively small area that is confined to 6 western seaboard counties of Ireland (5,993km^2). The Bat Conservation Ireland Irish Landscape Model indicated that lesser horseshoe bats select areas with broadleaf woodland and riparian habitats within a few kilometres of roosts and relies on linear habitats to commute along (Roche *et al.,* 2014).

Conservation Significance (Marnell *et. al.* (2022) of these roosts are "Small numbers of rarer species. Not a maternity roost". The Conservation Significance according to Marnel *et. al.* (2022) results determines the bat mitigation measures required. In relation to this species of bat, the mitigation recommended is "Provision of new roosting facilities where possible. Need not be exactly like-for-like, but should be suitable, based on species requirements. Minimum timing constraints or monitoring requirements".

It is considered that the of night roosts in Buildings 1 and 4 will not impact on the favourable conservation status in their natural range and will not have a detrimental effect on the local bat population due to the fact that Building 3 had a higher level of lesser horseshoe bat activity and therefore is a more important structure for this bat species.

b) Soprano pipistrelle

This species was recorded day and night roosting in Building 1 and Building 4 (1-2 individuals) in 2022, 2024 and 2025. Surveys in 2024 and 2025 indicated that Soprano Pipistrelle was also roosting within Building 3.

Soprano pipistrelle is an Annex IV bat species under the EU Habitats Directive. The status of this bat species is listed as Least Concern. The national soprano pipistrelle population is considered to be significantly increasing (Aughney *et al.,* 2021).

The modelled Core Area for soprano pipistrelle is a relatively large area that covers much of the island of Ireland (62,020km^2). The Bat Conservation Ireland Irish Landscape Model indicated that the common pipistrelle selects areas with broadleaf woodland, riparian habitats and low density urbanization (Roche *et al.,* 2014). Conservation Significance (Marnell *et. al.* (2022) of the Building 1 & 4 roosts is “Small numbers of common species. Not a maternity roost”. The Conservation Significance according to Marnell *et. al.* (2022) results determines the bat mitigation measures required.

In relation to the roosts recorded for soprano pipistrelles, the mitigation requirement is “Flexibility over provision of bat boxes, access to new buildings etc. No conditions about Timing or monitoring”.

Therefore it is considered that the temporary loss of a day and night roost will not impact on the favourable conservation status in their natural range and will not have a detrimental effect on the local bat population of soprano pipistrelles.

c) Natterer’s bat

This species was recorded roosting in the crevices of Building No. 4 in 2022. Brief signals for myotis bat (probably Natterers) in 2024 and 2025 indicate that this building may be used as a day roost for this species although data was not conclusive.

Natterer’s bat is an Annex IV bat species under the EU Habitats Directive. The status of this bat species is listed as Least Concern. The national Natterer’s bat population is currently unknown (Aughney *et al.,* 2021).

The modelled Core Area for Natterer’s bat is a relatively large area that covers much of the island of Ireland (52,864km^2). The Bat Conservation Ireland Irish Landscape Model indicated that the Natterer’s bat selects areas with broadleaf woodland, riparian habitats and mixed woodland (Roche *et al.,* 2014).

Conservation Significance (Marnell *et. al.* (2022) of these roosts are “Small numbers of rarer species. Not a maternity roost”. The Conservation Significance according to Marnell *et. al.* (2022) results determines the bat mitigation measures required. In relation to this species of bat, the mitigation recommended is “Provision of new roosting facilities where possible. Need

not be exactly like-for-like, but should be suitable, based on species requirements. Minimum timing constraints or monitoring requirements".

Therefore it is considered that the loss of a day night roost will not impact on the favourable conservation status in their natural range and will not have a detrimental effect on the local bat population of Natterer's bat.

d) Common pipistrelle

Common pipistrelle was the most frequently encountered bat species. This species was recorded in small numbers in Buildings 1 & 4 but a maternity roost was recorded in Building 2 (in 2022, 2024 and 2025) which will not be impacted on by the proposed development. Building 3 appears to be used a small day and night roost (based on 2024 and 2025 data).

Common pipistrelle is an Annex IV bat species under the EU Habitats Directive. The status of this bat species is listed as Least Concern. The national common pipistrelle population is considered to be significantly increasing (Aughney *et al.,* 2021).

The modelled Core Area for common pipistrelle is a relatively large area that covers much of the island of Ireland (56,485km^2). The Bat Conservation Ireland Irish Landscape Model indicated that the common pipistrelle selects areas with broadleaf woodland, riparian habitats and low density urbanization (<30%) (Roche *et al.,* 2014). Conservation Significance (Marnell *et. al.* (2022) of the Building 1 & 4 roosts is "Small numbers of common species. Not a maternity roost". The Conservation Significance according to Marnell *et. al.* (2022) results determines the bat mitigation measures required.

In relation to the satellite roost recorded for common pipistrelles, the mitigation requirement is "Flexibility over provision of bat boxes, access to new buildings etc. No conditions about timing or monitoring".

Therefore it is considered that the temporary loss of a day and night roost will not impact on the favourable conservation status in their natural range and will not have a detrimental effect on the local bat population of common pipistrelles.

5.3.2 Mitigation measures

Summary of mitigation measures

a) Provision of alternative bat roosting site in Building 3.

This structure was recorded as a roosting site for lesser horseshoe bats, common pipistrelle and soprano pipistrelle while crevices in the internal walls are suitable for Natterer's bat. Recommendations have been described to increase the long-term suitability of this building for roosting bats.

b) Renovation procedures

In order to ensure that renovation works are undertaken in a manner to ensure the no bats are harmed, procedures are described in detail.

Additional measures are also described in relation to:

c) Lighting recommendations (particularly important for lesser horseshoe bats)

d) Landscape recommendations

a) Alternative bat roost at Building 3

It is proposed to focus on Building 3 as an alternative bat roost. This building provided roosting space for three bat species (lesser horseshoe bat, common pipistrelle and soprano pipistrelle) and has crevices suitable for Natterer's bats. Therefore this building has the capacity to provided alternative roosting for the four species of bat likely to be impacted on the renovation works for Building 1 and Building 4.

The following works are recommended to turn Building 3 into a Bat House:

- Stabilise the external walls of the shed (i.e. re-pointing by hand ensuring that they are bat free prior to re-pointing. This can be undertaken by checking the crevices using a high power torch searching for potentially roosting bats).
- Insert a new doorframe and solid door entrance to shed (ensure that there are no bats roosting in the stonework around the existing door frame prior to works).
- Remove oil tank at gable end of shed.
- Install predator protection around the gable window (North Elevation) to protect roosting bats. This entails attaching a sheet of smooth steel (Orange Rectangle, Figure 5) to the existing stone work which will prevent predators from using stonework to climb into the interior of the structure). Fix a second sheet of steel along the lower part of the window in a manner to prevent predators jumping from the ground onto the base of the opening (i.e. the steel sheet is attached with an upward angle to deflect predators such as cats).
- Internally, install a plywood (3/4 inch marine ply, painted black using a mammal friendly paint product) partition (Blue Lines, Figure 5) around the gable window to reduce wind and sunlight directly entering the interior of the building.
- Install 4 bat boxes along the East Elevation internal wall at the highest point possible (Red Squares on **Figure 6**).
- Ensure that there is no outdoor lighting attached to this building (plus not interior lighting installed) and that any lighting within the proposed development site does not shine on this building, particularly around the gable window. In order to reduce any potential spillage of lighting from the operation of the proposed development site, it is recommended that a solid timber fence is constructed from the gable wall (northern elevation – shown as large graded blue square on Western Elevation, **Figure 6**) for at least 5m from the structure.
- Close off the door of the building shown on the East Elevation to ensure the there is no gaps to allow lighting or wind to enter the building.

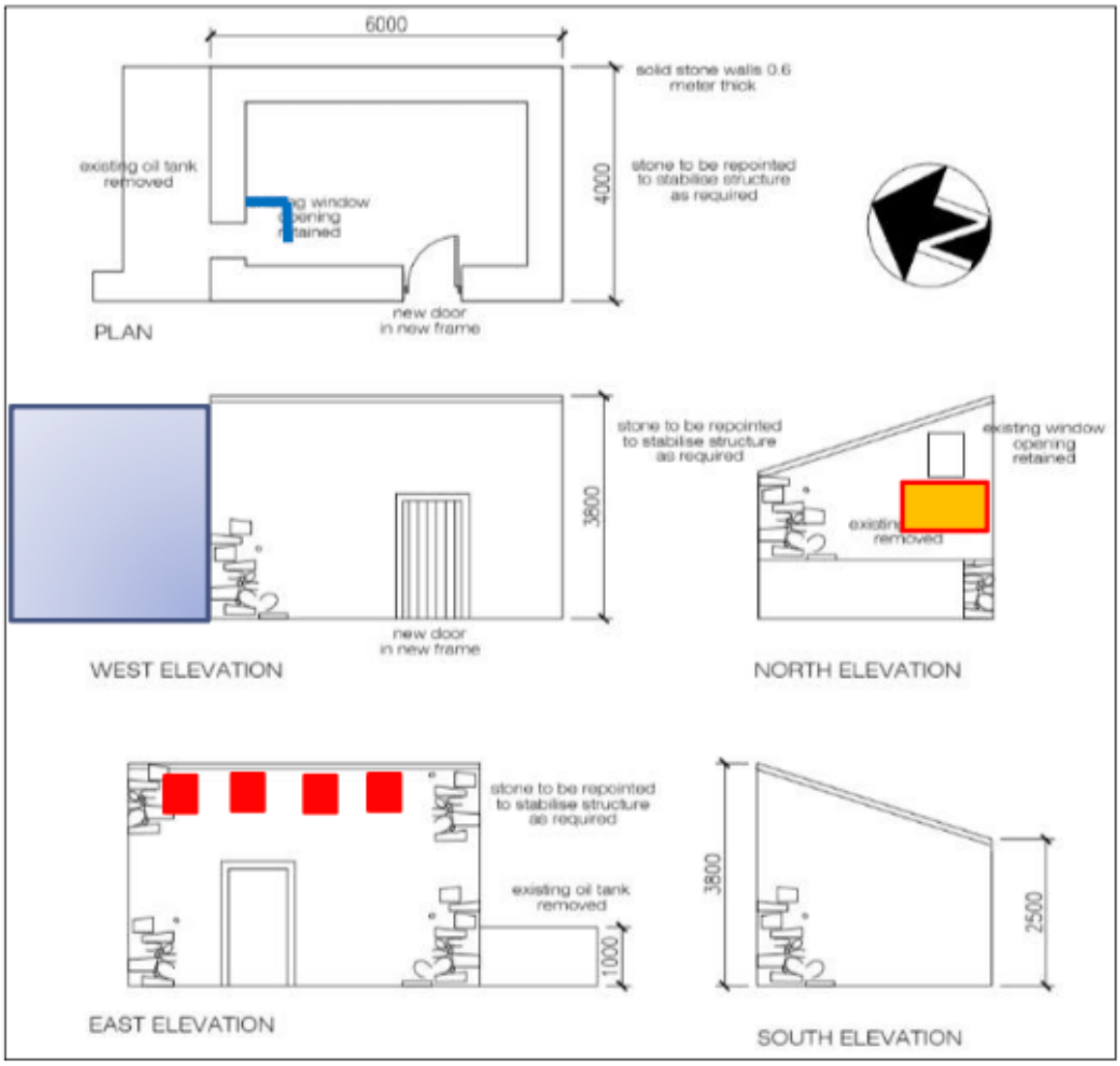

Figure 6. Drawings of Building 3 and proposed bat mitigation works.

Figure 7. Example of predator proofing on external wall around entrance point of bat house.

b) Renovation Procedures

Renovation works cannot be undertaken on Building 1 and Building 4 until the “Bat House” (Building 3) is finished. These works will be carried out during the following months: September, October, November, February, March and April.

Building 1

In order to ensure that there are no lesser horseshoe bats present in the building prior to renovation works, a static bat detector unit is required to place in the hot press for one week. Once there are no bats present, close the window to the rear of the building to prevent access. Please note that this cannot be undertaken until an NPWS Derogation licence is received for this project. The proposed renovation works for Building 1 include the replacement of the existing roost with a natural slate roof. As soprano and common pipistrelles were recorded emerging from this area, the following bat mitigation measures are required:

- Undertaken a dawn survey prior to roof removal.
- Remove ridge tiles, a section of the slates and associate facia/soffit by hand and under supervision of a bat specialist.
- Any bats encountered should be safely removed by the bat specialist to the “Bat House”.

Building 4

Any crevices proposed to be pointed within the stonework of this structure should be inspected prior to infilling using a high-powered torch and endoscope to ensure that it is bat free.

c) Lighting Plan

This element of the proposed planning application is important aspect in relation to local bat populations, particularly in relation to lesser horseshoe bats. All European bat species, including Irish bat species, are nocturnal. They usually hide in roosts during the daytime, while fly to feeding areas or drinking sites using commuting routes during the night. Annually bats will hibernate in the winter, swarm in the autumn and give birth in the summer months. In all aspects of the bat lifestyle, Artificial Light at Night (ALAN) may significantly change their natural behaviour in relation to roosting, commuting and feeding. While bats are naturally exposed only to very low lighting levels produced by moonlight, starlight and low intensity twilight, light levels greater than natural light levels can impact on the lifestyle of bats.

Bats are light sensitive species, hence their nocturnal activities. Three bat species recorded commuting and foraging within the survey area are Light Tolerant or Semi-tolerant bat species (Leisler’s bat, common pipistrelle and soprano pipistrelle). However, the remaining bat species are all light sensitive and therefore the outdoor lighting plan should be designed for these bat species. It is important that strict lighting guidelines are required to reduce the potential impact of the proposed development on local bat populations as standard best practice. In relation to lesser horseshoe bats, it is a conservation objective to ensure that there is no increase of outdoor lighting win the foraging area. As the bat house is the location of the lesser horseshoe

bat alternative roosting, it is important that there is no lighting on, in or adjacent to this structure. It is recommended that there is no lighting of the garden area of the proposed development site and to limit the amount of lighting spilling from the interior of the buildings when in operation.

Luminaire design is extremely important to achieve an appropriate lighting regime. Luminaires come in a myriad of different styles, applications and specifications which a lighting professional can help to select. The following will be considered when choosing luminaires. This is taken from the most recent BCT Lighting Guidelines (BCT, 2018). Consultation was undertaken with the lighting specialists to reduce the potential impact on local bat populations.

○ All luminaires used will lack UV/IR elements to reduce impact.

○ LED luminaires will be used due to the fact that they are highly directional, lower intensity, good colour rendition and dimming capability.

○ A warm white spectrum (2200 Kelvins will be used to reduce the blue light component of the LED spectrum).

○ Luminaires will feature peak wavelengths higher than 550nm to avoid the component of light most disturbing to bats.

○ Column heights should be carefully considered to minimise light spill. The shortest column height allowed should be used where possible.

○ Only luminaires with an upward light ratio of 0% and with good optical control will be used.

○ Luminaires will be mounted on the horizontal, i.e. no upward tilt.

○ Any external security lighting will be set on motion-sensors and short (1min) timers.

○ As a last resort, accessories such as baffles, hoods or louvres will be used to reduce light spill and direct it only to where it is needed.

Any external lighting for the proposed development will strictly follow the above guidelines and these will be strictly implemented during construction and operation phase of the proposed development.

Conservation objectives for lesser horseshoe bats (i.e. no outdoor lighting that may impact on bat foraging and commuting habitat) will be incorporated into the Lighting plan.

d) Landscaping

Native tree, shrub and plant species will be included in the landscaping plan. Night-scented planting will be used to encourage foraging areas for local bat populations. Planting is particularly important in vicinity of Building 3 to increase tall vegetation cover to allow lesser horseshoe bats to safely exit Building 3 under the cover of darkness (ensure that planting is at least 3m from the gable window entrance point to reduce predators potential using such vegetation to gain access to the structure.

The conservation objectives for lesser horseshoe bats (i.e. no reduction in bat foraging and commuting habitat) will be incorporated into the Landscape Pan. These additional measures

will add to the compensatory requirement to ensure that there is no accumulative loss of linear habitats.

6. Monitoring

Monitoring is recommended post-construction works. This monitoring should involve the following

In relation to the bat house, monitoring is required for a total of 2 years. A temperature data logger will be installed and maintained for a total of 2 years. Monitoring will involve a summer survey to determine the level of bat usage of the Bat House.

7. Conclusions

The bat surveys undertaken for this proposed development site yielded a large amount of results. A total of six bat species were recorded: Lesser horseshoe bat, common pipistrelle, soprano pipistrelle, Leisler's bat, brown long-eared bat and Natterer's bat. All four buildings located within the survey area were recorded as bat roosts:

- Building 1 (Farm house): Day roost for soprano and common pipistrelles and night roost for lesser horseshoe bat, soprano pipistrelles and common pipistrelles.

- Building 2 (Dormer bungalow): Maternity roost for common pipistrelles.

- Building 3 (Shed): Day roost and night roost for lesser horseshoe bat, soprano pipistrelles and common pipistrelles.

- Building 4 (Garage): Day roost for Natterer's bat and night roost for lesser horseshoe bat.

The proposed development planning and derogation application relates to Building 1 (Farm house) and Building 4 (Garage). The renovation of these buildings will result in the loss of the following roosts:

- Day roost for soprano and common pipistrelles and night roost for lesser horseshoe bat, soprano pipistrelles and common pipistrelles.

- Day roost for Natterer's bat and night roost for lesser horseshoe bat.

The operation of the site will also increase human activity and therefore noise and lighting. This will also potentially impact on local bat populations.

Therefore the potential impact of the proposed development relating to Building 1 and Building 4, is, overall, considered to be Permanent Negative and to have a scale of impact of Slight impact on named bat species (according to criteria set out in Tables 2c and d, Section 1.2.2). This is primarily in relation to the fact that the roosts recorded are not important maternity sites (Building 2 and Building 3 are significantly more important for local bat populations) and to the lighting plan for the proposed development scheme and the presence of light-sensitive bat species.

The provision of Building 3 as a bat house will likely increase the roosting opportunities for lesser horseshoe bats, Natterer's bat and soprano pipistrelles while supporting the existing maternity roost for common pipistrelles in Building 2.

Additional mitigation measures, if implemented fully, will reduce the potential impact on local bat populations to Non-significant Permanent Negative.

Appendices

Appendix 1. Bat Assessment: Ardgroom Inward, Beara, Co. Cork. (Tina Aughney 2022)

Appendix 2. Bat Survey Report Proposed Development at Ardgroom Inward, Beara, Co. Cork On Behalf of Cillian and Maeve Barry (DixonBrosnan 2024)

Appendix 3. DixonBrosnan Letter 2025