

# Bat Derogation Licence Application – Supporting Document

## Lissardagh House

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**Prepared for:** Pat O'Leary and Ann-Marie O'Brien, Lissardagh House, Lissardagh, Co. Cork.

**Project:** Lissardagh House Renovation, Co. Cork.

**Purpose:** To inform a bat derogation licence application.

**Prepared by:** Colm Breslin BSc (Hons), Tom O'Donnell BSc (Hons) MSc CEnv MCIEEM.

**Date:** 04/03/2025

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### Introduction

O'Donnell Environmental Ltd. were commissioned by Wain Morehead Architects on behalf of Pat O'Leary and Ann-Marie O'Brien in January 2025 to prepare a bat derogation license application in relation to Lissardagh Main House, Lissardagh, Co. Cork in anticipation of upcoming maintenance works. The proposed works at Lissardagh Main House were successfully granted a derogation licence which expired (DER/BAT 2024-74) before the works could be carried out.

The 'Main House', to which the current license application pertains, is in close proximity to Lissardagh Coach House which is the subject of a separate derogation license (DER/BAT 2025-59; see **Appendix C**). The Coach House is used for non-maternity roosting by a number of species. The methodology and measures outlined herein considers and responds to the measures and conditions relating to the Coach House derogation license application, especially in relation to timing of works whereby the two roof structures will not be worked on simultaneously.

The purpose of the proposed works on the Main House is to address the degradation of the roof and coverings (slate, leadwork, fascia & soffits, etc.) and external render in order to preserve the historic structure and aid ventilation.

The aims of the study were to assess and evaluate the likely importance of the existing structures to bats. The purpose of the current report is to inform a bat derogation license application which will be made to NPWS.

The Client proposes to renovate Lissardagh Main House. Elements of the proposed works which have potential to impact on bats include the following (see **Appendix A** for timeline of works and design information):

- Installation and decommissioning of scaffolding.
- Investigative works to roof and external wall render.
- Removal of existing render and installation of new external wall render.
- West porch and North WC reroofing.
- Roof repairs.
- Chimney works (re-render, coping, leadwork, pots etc.).
- French drain installation.

Investigative works to the roof will largely be external. Similarly, roof repairs (dependant on the results on investigative works) is predicted to be largely external and limited to timber splicing, localised timber treatment, minor slate repair, and lead flashing repair. Attic ventilation will be supplemented with new inline

slate vents at ridge level. It is currently proposed that the existing cellulose attic floor insulation will remain as is currently in place and no variation of insulation is required. The existing sand cement wall render will be replaced with a breathable lime render. The perimeter French drain will be added

Ecofact were engaged by the Client in July 2023 for works pertaining to Lissardagh Main House and a derogation licence was issued which has since expired (DER/BAT 2024-74). Current understanding of the importance of the Main House to roosting bats, as presented herein, is primarily informed by Ecofact (2023) (see **Appendix B**), and the Main House was the subject of that report. While the surveys which informed that report were carried out in 2023 and consisted of a single emergence survey only, no significant perturbation has occurred locally and the findings are supported by more recent data collected by O'Donnell Environmental as outlined below, and therefore overall, it is considered that understanding of the bat context of the building is not significantly limited.

O'Donnell Environmental were engaged in June 2024 for works pertaining to the adjacent Coach House. During the course of these surveys, incidental bat data on Lissardagh Main House was gathered. Tom O'Donnell and Colm Breslin of O'Donnell Environmental carried out internal inspections of the attic of Lissardagh Main House on 3<sup>rd</sup> April 2023 (to inform a quote which was not successful) and again on 10<sup>th</sup> July 2024 and 16<sup>th</sup> July 2024 to deploy and retrieve a detector located in the attic of the Main House.

A detector was deployed between the 10<sup>th</sup> and 16<sup>th</sup> July 2024 (6 survey nights) to i) to provide data on local ecological context as part of our survey work at the Coach House and ii) validate the list of species previously recorded occurring within the roof space.

A surplus thermal night-vision aid (NVAs) was used on Lissardagh Main House on 13<sup>th</sup> June 2024 during the course of surveys on the adjacent Coach House. An ultrasonic bat detector was deployed within the viewshed of this camera to confirm species identification of observed individuals exiting the house.

## Results

The attic of Lissardagh Main House is used by a number of bats species for roosting and is likely to host a Whiskered Bat maternity roost (Ecofact (2023); see **Appendix B**). Roosting by *Myotis* sp. (20+ individuals, thought to be Whiskered Bat), Common Pipistrelle and Soprano Pipistrelle was identified within the attic of Lissardagh House (EcoFact, 2023). Bats were identified exiting primarily from the southwestern and northern portions of the roof. Small numbers of bats were recorded exiting from the centre of the southern and western portions of the roof respectively. A count of 27 bats were observed exiting the attic of Lissardagh House on this date. No internal inspection was carried out by Ecofact.

From a relatively brief internal inspection of the attic by O'Donnell Environmental, bats appear to roost in a number of spaces throughout the attic and are largely contained in the void space between the bitumen felt and slate roof. Roosting appeared concentrated at along the ridges and hips of the timber roof structure based on the significant accumulation of droppings beneath these locations.

While roosting by individuals of a variety of bat species were identified diffusely throughout the attic space, accumulations of Soprano and Common Pipistrelle were identified above the southeastern hip-roof section with significant scratching heard in this location. Additionally, Whiskered Bat were identified within the western attic portion with at least 10 individuals on the wing observed within the roost. A dead juvenile Whiskered Bat was identified within the accumulation of droppings underneath this location. Common Pipistrelle was additionally identified centrally within the southern portion of the attic. No other bat species were identified during the course of interior inspections, with the majority of bat signs (scratching) noted within the inaccessible void between the slate and roofing membrane.

It is important to note that the attic space of the main house contains a wide variety of potential roosting spaces (voids surrounding bitumen felt, wooden joinery, exposed interior brickwork etc.) and as such, the entirety of the attic space of Lissardagh Main House should be considered as a roosting space.



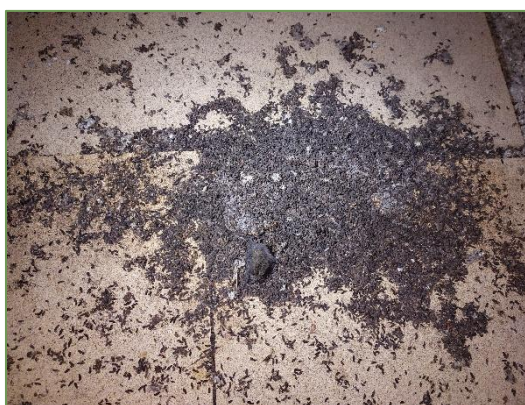
**Plate 2.1** Whiskered Bat roosting along the ridge beam within the western attic section of Lissardagh House.  
(Photo by C. Breslin, NPWS Licence Ref. DER/BAT 2024-09; 008/2024).



**Plate 2.2** Soprano Pipistrelle within the exposed interior brickwork of Lissardagh House attic.  
(Photo by C. Breslin, NPWS Licence Ref. DER/BAT 2024-09; 008/2024).



**Plate 2.3** Common Pipistrelle roosting in the ridge beam joinery within the attic of Lissardagh House.  
(Photo by C. Breslin, NPWS Licence Ref. DER/BAT 2024-09; 008/2024)



**Plate 2.4** Significant accumulation of bat droppings underneath the hip-roof apex within the western attic portion, with dead juvenile whiskered bat present also.

Passive ultrasonic monitoring was carried out by O'Donnell Environmental within the attic of Lissardagh Main House over 6 nights in the summer of 2024. Full results are presented below (see **Table 3.1**). As identified in Ecofact (2023), roosting by *Myotis* spp. (i.e. Daubenton's Bat, Natterer's Bat and / or Whiskered Bat), Common Pipistrelle and Soprano Pipistrelle were identified within the attic of Lissardagh Main House.

All of the above species were recorded within the attic of Lissardagh Main House during the passive bat monitoring period. In addition, Brown Long-eared Bat was recorded within the attic space. This species was not identified during the course of previous surveys. Small numbers of registrations attributed to Leisler's Bat were recorded. However, due to the intensity and loudness of their calls, and the number of minor gaps present within the overall roof structure, it was considered that these registrations likely occurred from bats outside of the building.

**Table 2.1 – Lissardagh Main House Attic Passive Bat Monitoring Results 2024 (number of registrations\*).**

Survey Night (2024)	BLE <sup>^</sup>	Common Pipistrelle	Daubentons Bat	Leislars Bat	Natterers Bat	Soprano Pipistrelle	Whiskered Bat	Total
10 July	22	27	5	2	4	1	153	214
11 July	13	6	1	1	0	0	51	72
12 July	43	20	4	1	2	2	75	147
13 July	68	22	14	0	1	0	74	179
14 July	23	20	5	0	1	0	62	111
15 July	34	57	21	0	5	1	103	221
16 July	0	7	2	0	1	0	7	17
<b>Total</b>	<b>203</b>	<b>159</b>	<b>52</b>	<b>4</b>	<b>14</b>	<b>4</b>	<b>525</b>	<b>961</b>

Note: \*registration is defined as the presence of bat species in a recording of up to 15 seconds; <sup>^</sup>BLE = Brown Long-eared Bat.

The thermal camera and associated ultrasonic detector overlooking the western aspect of Lissardagh Main House on 13<sup>th</sup> June 2024 recorded Whiskered Bat exiting from the southwestern portion of the roof, as was identified in the previous EcoFact report (see **Appendix B**).



**Plate 2.5** Viewshed of thermal camera overlooking the western aspect Lissardagh Main House.



**Plate 2.6** Thermal viewshed of camera overlooking the western aspect Lissardagh Main House, showing Whiskered Bat exiting from the southwestern portion of the fascia-soffit (white arrow).

## Potential Impacts

Lissardagh Main House hosts roosting by a variety of bat species, including maternity roosting by at least one species (Whiskered Bat). Six of the nine bat resident Irish bat species have been recorded within the attic of Lissardagh Main House.

If the proposed works does not proceed, the 'do nothing' scenario is that the existing environment within the site boundary is likely to remain as described herein in the short term at least. In the medium and long terms (in the absence of intervention) there degradation of the roof would occur through insufficient ventilation and water ingress.

The proposed works in the attic of Lissardagh Main House consist of maintenance only, and following works is proposed that bat roosting will continue as currently occurs. However, in the absence of avoidance and mitigation measures, negative effects on roosting bats would occur on a temporary basis.

## Mitigation

A mitigate-by-design approach was adopted in the design of the proposed development and O'Donnell Environmental Ecologists collaborated with WMA Architects Ltd. to incorporate avoidance and mitigation measures for bats in the emerging design. Provision has been made for all bat species recorded within the attic of Lissardagh Main House and the schedule of works coordinates with the proposed works at Lissardagh Couch House as required by DER/BAT 2025-59 (see **Appendix A** for the sequencing of works).

Bats and their roosts are protected by legalisation, and the proposed works may only proceed following the grant of a derogation license issued under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations (2011). Notwithstanding any conditions of that license, should it be granted, the following measures will be implemented to minimise risks to bats:

***Timing of works:***

Reason and Wray (2023) outline the optimal timing of works of known bat roosting structures. Whiskered Bat are unlikely to overwinter in the attic. Due to the occupied nature of the house and the warm attic, no winter restrictions (December-March inclusive) are considered warranted in this instance.

A seasonal restriction on works to avoid disturbance of the maternity colony is considered warranted and so no roof works will take place on Lissardagh Main House during the maternity season (May-September inclusive). Works with potential to cause disturbance (i.e. scaffolding installation, existing render removal, investigative works, roof repair, chimney works) will all take place outside of the core maternity season or be managed to ensure no negative effects occur. The extent of internal roof repair works will be dependant on investigative works but are predicted to be limited in extent to timber splicing and localised timber treatment.

During rendering portions surrounding the primary bat access/egress at the southwest corner will be prioritised such that no works will take place surrounding this section during the maternity season. Due to the seasonal constraints of lime render installation which is slow-curing and requires extended periods of mild weather, some rendering works will unavoidably extend into early May. These works will be minimally invasive for bat species and will be scheduled such that in May they will take place at the lower portions of the external walls away from where bat access/egress occurs. The render finish coat (Argatherm) will be applied outside of the maternity season.

By the 30<sup>th</sup> April 2025 scaffolding height proximal to the identified access / egress point on the south-west corner of the Main House will be lowered by one level (minimum 2 meters from the eaves) to avoid any disturbance to emerging or re-entering bats.

No night-time works are proposed, and no construction phase or security lighting will be allowed.

External investigative works to the roof and render, will take place concurrently with existing render removal.

A bat-licensed ecologist will supervise the above works as detailed below.

***Supervision of works:***

Prior to the commencement of all demolition works, a bat-licensed ecologist will be onsite to carry out repeat daytime inspections and monitoring where appropriate. A bat licensed Ecologist will be engaged to provide a toolbox talk on site at commencement of works and to supervise key aspects of the proposed works including existing render removal, external roof investigative works, roof works. Demolition works that interact with the attic including investigative works will take place with hand tools to minimise the potential impact to any bats roosting within. External roof investigative works will not take place across the entire roof structure such that bats will be able to move to undisturbed portions.

***Lighting:***

In order to avoid potential impacts of lighting on roosting/foraging bats, construction works will only take place during daylight hours, and the site will not be lit during the hours of darkness excluding any existing security lighting which is already in place

***Provision of access post-works:***

The entirety of the attic of Lissardagh Main House is currently accessible to bats. The existing roof structure provides an abundance potential access/egress location through loose lead flashing and gaps in the fascia soffit. It is currently proposed to leave the entirety of the attic as it currently exists for bat species following the completion of works. This measure supercedes that contained in the previous derogation licence which proposed bat compartments as they are not considered a viable mitigation given the number of species involved and the complexity of the roof.

In order to facilitate access post-works, it is proposed that the primary access/egress points on the southwestern and northern portion of the roof are maintained at a minimum. Recent guidance has shown that the likelihood of bats returning to their roosting location is reduced significantly if entrances are not sited proximal to the original location, and distances of greater than 50cm should be avoided (Jahelkova et al., 2024). Additional access/egress points will be created in the leadwork in agreement with the supervising bat-licensed ecologist onsite to maintain a variety of access/egress points for bat species. No artificial lighting will conflict with the location of bat access.

***Materials:***

The use of bat-safe construction materials may only be used within the attic if required. Underlay within the attic may only be composed of traditional bitumen felt (1F) as it currently found within the attic.

Any timbers must be pressure treated offsite. Onsite application of wood preservative should be avoided, and if necessary, only products certified to be 'bat safe'<sup>1</sup> will be used (see **Appendix D**). The bat-licensed Ecologist will be consulted in relation to any onsite treatment of timber, and details of treatments used will be recorded and included in a post-construction compliance report which will be issued to NPWS.

The bat-licensed Ecologist will carry out a final inspection to confirm that the attic roost has been maintained as it currently exists.

# Derogation Licence Application Checklist

The table below provides responses to four key issues which will be considered during the derogation license decision making process.

<p><b><i>Explanation as to why the derogation licence sought is the only available option for works and no suitable alternative exists as per Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations.</i></b></p> <p>Pat O’Leary and Ann-Marie O’Brien intend to carry out necessary maintenance works on Lissardagh House. The attic of Lissardagh House is currently threatened by minor water ingress and the trapping of moisture. The purpose of the proposed works is to address the degradation of the roof and coverings (slate, leadwork, fascia &amp; soffits, etc) and external render in order to preserve the historic structure and aid ventilation.</p> <p>Alternative solutions were considered, and the best available solution has been proposed . The alternative / ‘do-nothing scenario’ in this instance is not carry out necessary maintenance. In the absence of maintenance, the existing timber and general roof degradation would result in the deterioration of the attic space as a viable roosting space for a variety of bat species, including a locally important Whiskered Bat maternity colony in the medium term (7-15 years following EPA, 2022). Continued lack of maintenance would result in the complete loss of the attic space as a roosting space for bat species in the medium-long term.</p>	<input checked="" type="checkbox"/>
<p><b><i>Evidence that actions permitted by a derogation licence will not be detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range as is required under Section 54(2) of the European Communities (Birds and Natural Habitats) Regulations.</i></b></p> <p>Based on best available information from previous surveys and derogation licence (see <b>Appendix B</b>), the attic of Lissardagh House is resident to a large variety of bat species, including maternity roosting of Whiskered Bat. Roosting is concentrated at particular aspects of the attic throughout (hip roof joinery, ridges etc.). Provision has been made for all of the species identified within the attic.</p> <p>The proposed works primarily involve maintenance of the external wall render and minor roof repairs. Disturbance will be localised in extent and time.</p> <p>Avoidance is the principle measure being employed for the proposed works, with no works to the roof within the maternity season. These works will take place outside of the maternity season when bats are active and least prone to disturbance (Reason and Wray, 2023).</p> <p>The existing attic will be maintained as it currently exists and left fully accessible to bats post-works. The primary bat access/egress points will be maintained to facilitate continued access.</p> <p>The proposed works will be carried out under the supervision of a bat-licensed ecologist.</p> <p>It is considered that the proposal will not be detrimental to the maintenance of the bat populations at a favourable conservation status in their natural range and that the proposal will not have a detrimental effect on the local bat populations.</p>	<input checked="" type="checkbox"/>
<p><b><i>Details of any mitigation measures planned for the species affected by the derogation at the location, along with evidence that such mitigation has been successful elsewhere.</i></b></p> <p>A detailed summary of mitigation measures are outlined in this supporting document.</p>	<input checked="" type="checkbox"/>
<p><b><i>As much information as possible to allow a decision to be made on this application.</i></b></p> <p>Full information is outlined in this supporting document, and this information is considered valid and represents the best available data.</p>	<input checked="" type="checkbox"/>

## References

- Collins J. (Ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.
- EPA (2022). Guidelines on the Information to be Contained in Environmental Impact Assessment Reports.
- Jahelková, H., M. Ceľuch, J. Ferguson, E. Cepáková, A. Kepel, H. Krättli, H. Limpens, S. D. Mantoiu, M. Schillemans, P. Schnitzerová, K. Stoner, S. Waring (2024): Guidelines for bats, insulation and lining materials. EUROBATS Publication Series No. 11. UNEP/ EUROBATS Secretariat, Bonn, Germany, 64 pp.
- Marnell, F., Kelleher, C., Mullen, E. (2022). Bat mitigation guidelines for Ireland. National Parks and Wildlife Service. Department of Housing, Local Government and Heritage. Irish Wildlife Manuals, No.134, 2022.
- Reason, P.F. and Wray, S. (2023). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Chartered Institute of Ecology and Environmental Management, Ampfield.



# Appendix A

## Design Information and Sequencing of Works



Existing vehicular entrance: to be used for site access

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--- Combined Foul & Surface water

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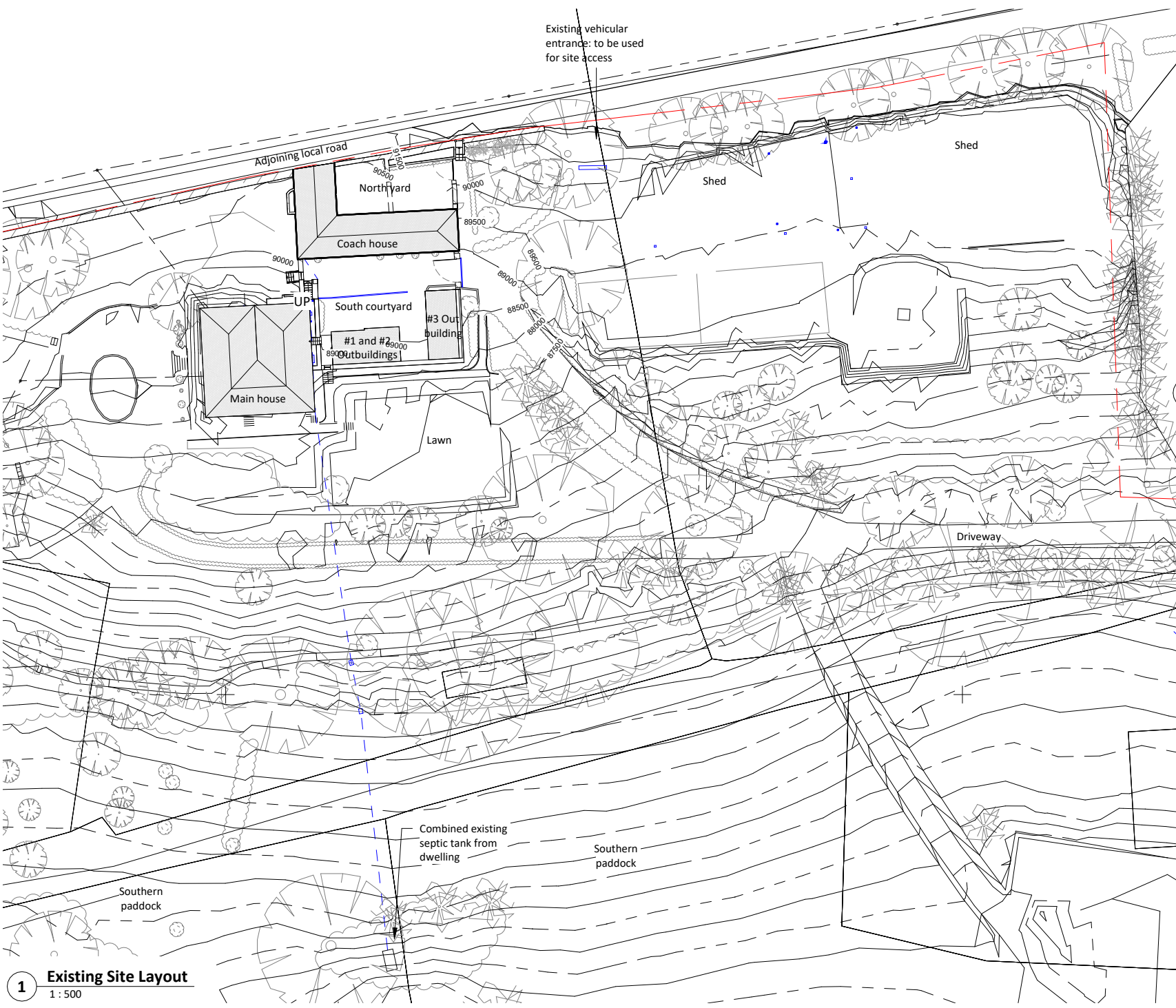
Revision Schedule

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**Pat O'Leary & Ann-Marie O'Brien**  
 Project:  
**Lissardagh Coach House**  
 Lissardagh, Co. Cork



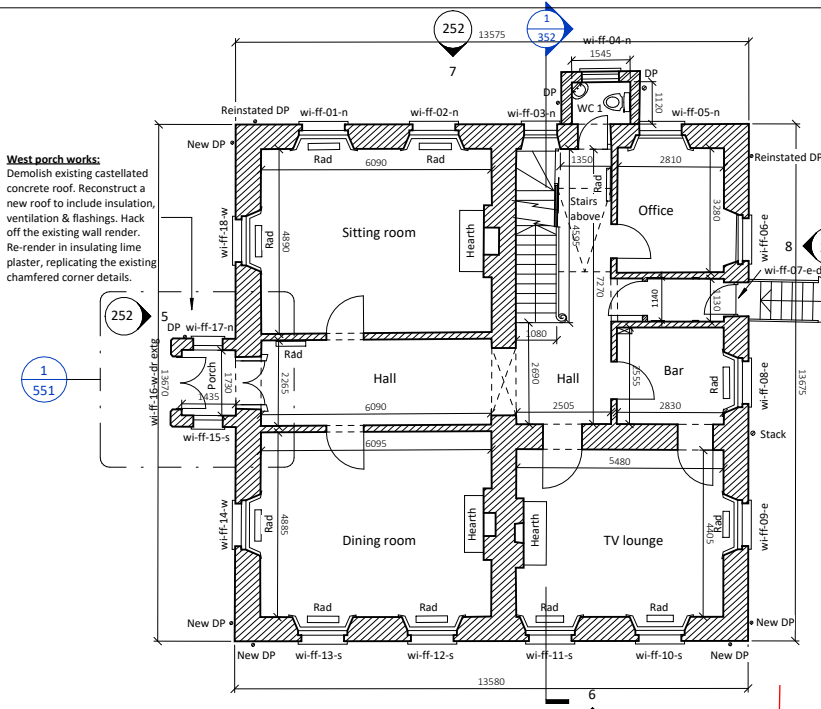
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Drawn: OMS	Checked: JK	Revision No.: 3

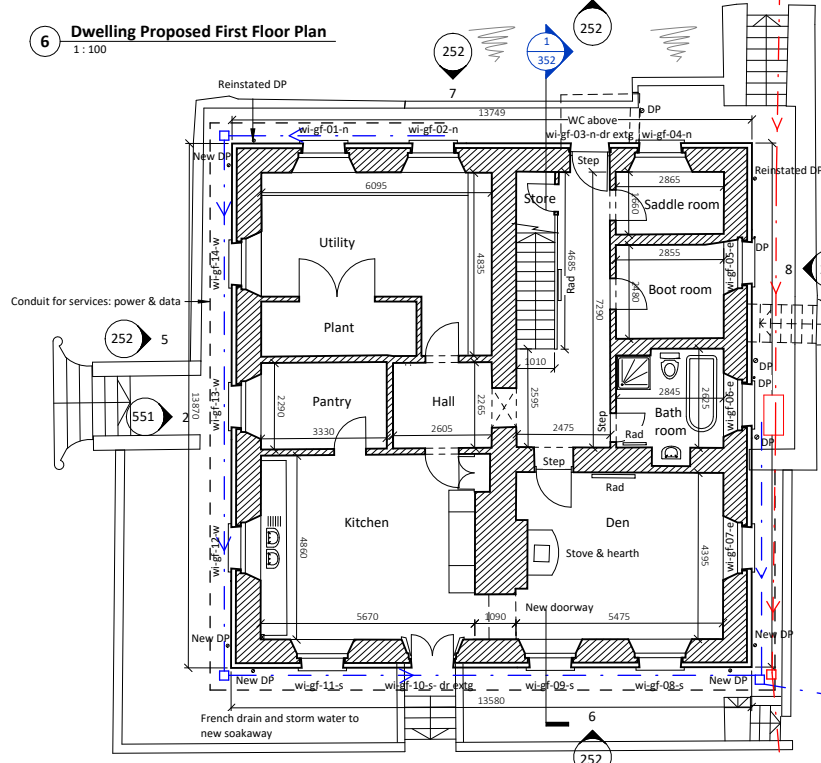


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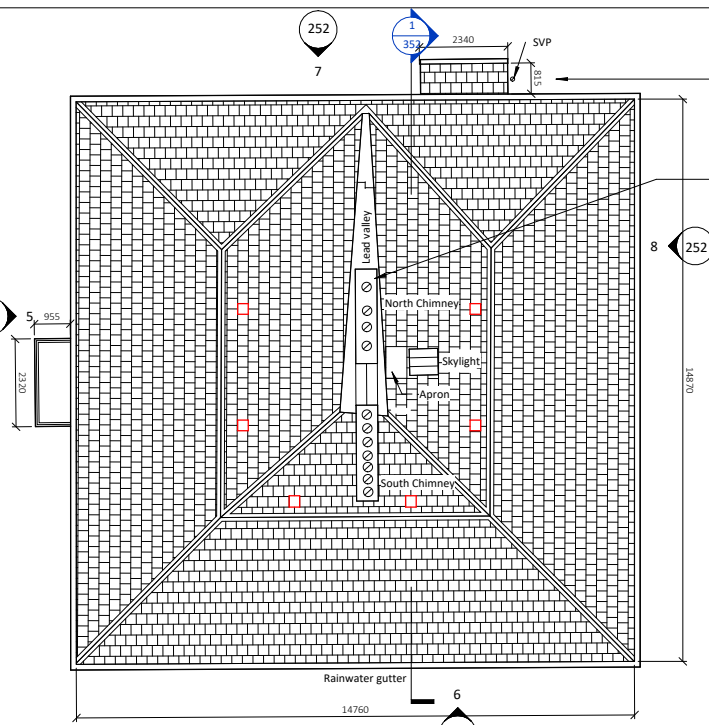
**West porch works:**  
Demolish existing castellated concrete roof. Reconstruct a new roof to include insulation, ventilation & flashings. Hack off the existing wall render. Re-render in insulating lime plaster, replicating the existing chamfered corner details.



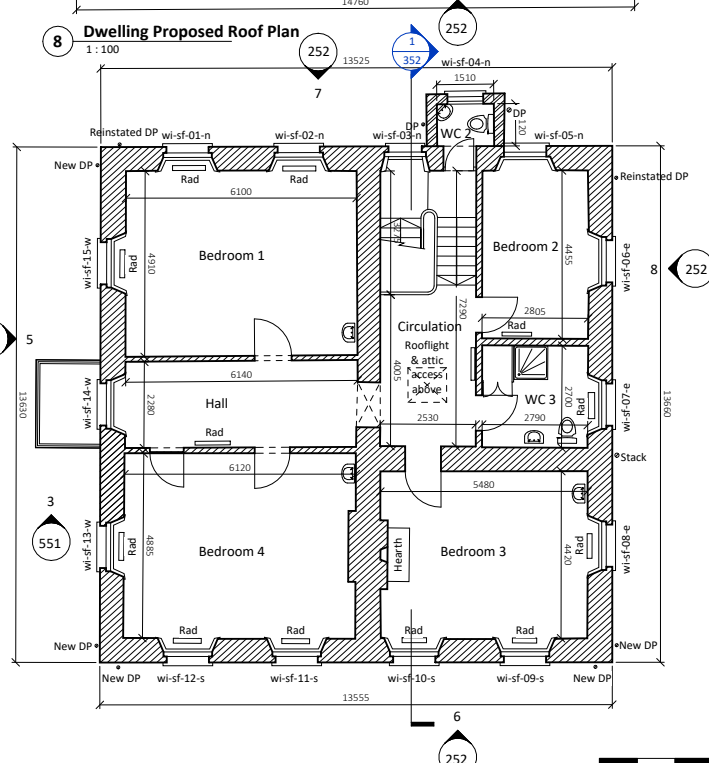
**6 Dwelling Proposed First Floor Plan**  
1:100



**5 Dwelling Proposed Ground Floor Plan**  
1:100



**8 Dwelling Proposed Roof Plan**  
1:100



**7 Dwelling Proposed Second Floor Plan**  
1:100

**North annex tower:**  
Hack of the existing sand cement render and re-render with lime insulating plaster. Test the existing roof finish for asbestos. Remove by specialist, if required. Recover the existing roof structure include insulation, ventilation & flashings.

**Remedial chimney works:**  
Hack the existing sand cement render from the two chimney stacks. Inspect condition of existing brickwork, pointing, coping, flues, lead and pots. Following inspection, allow for repair damage to the above items, as required. Repoint and re-render the chimney stacks with lime render (NHL5). Install a fall arrest tie-off point to chimney, for future roof access.

**Remedial roof works:**  
**Ventilation:**  
A new stack-ventilation strategy is proposed from eaves to ridge: the fascia/soffit will be reconstructed to incorporate sufficient vents and new in-line slate vents will be installed along the ridge, on the valley side to be visually discrete. New in-line vents 'Leadworx lead roof vent' or similar approved.  
**Fascias and soffits:**  
Remove PVC fascias and soffits, taking care to retain the existing lath and plaster soffit. Review condition of cross-framing between the truss ends to detail, making good as required. Construct new hardwood fascia and soffits over the retained lath and plaster soffit.  
**Leadwork:**  
Remedial works to the lead hips, ridges and valleys as required, as per 'Lead Sheet Training Academy' guidance re lead codes, lengths, valley step details, hip and ridge roll details. Roof valley detail: review to ensure existing falls are sufficient. Dress lead valley into the north gutter.  
Refurbish timber substrate and lining, to be reconstructed using white deal timber. Include a membrane (Tyvek metal or similar) between lead and timber substrate.  
Timber walkway to be included to protect lead from footfall during roof maintenance.  
Slatting generally sound. Review and repair/replace any slipped, loose slates as required. Replacement available from salvaged slate from the coachhouse.  
**Rainwater goods:**  
Carefully dismantle and remove cast iron 'Ogee' gutter profiles. Clean with wire brush. Paint with rust converter, primer, undercoat and finish coat of oil-based gloss. Repair any damage with epoxy. Replace unusable sections with matching 'ogee' profiles. Install downpipes on hinged downpipe brackets, to agreed offsets from lime render. Include a suitable overflow, visible and located below level of potential infiltration.  
**Timber treatment & repairs:**  
Following inspection, allow for localised timber splice repairs to any decayed or damaged roof timbers. Allow for rebuilding timber valley boards in White Deal. Allow for treatment of roof timbers, with product approved by the project ecologist and the project decay specialist (Wykabor 10 or similar approved).  
**Attic services:**  
Replace metal water tank with insulated and covered plastic tank c300ltr. Install new lighting for access and smoke/fire alarm.

**Façade works:**  
- Render to be installed as per the attached manufacturer's instructions: 'Technical Handbook for External Application of Thermal Plaster'. Windows/doors to be protected during the hacking off and rendering. Temporarily remove the existing wall-mounted services, rainwater goods, SVPs, etc. Hack off the existing sand cement render to stone walls and brick window reveals. Following hacking, carry out local repairs to ope reveals and sundry wall substrates. Substrate must be thoroughly clean, dry, well consolidated, free of loose material. If needed use Diaseen Aquabond primer: in this case, no moisture is required. Apply Diathonite Regularization anti-salt rendering if any masonry salts are present.

- Install 50mm insulated lime render (Diaseen Diathonite Evolution) in 2 layers of 25mm. Timber battens gauges embedded in plaster, removed immediately and backfilled. Do not compress the Diathonite plaster, to preserve the porosity of the product. Include FG Mesh (Polites 140) in fresh plaster, gently pressing it about halfway thickness.  
- Incorporate 'WATstop' at plinth, to encapsulate the plaster and prevent water infiltration. Before applying first coat of 'Argathem Coloured' finishing coat, wet Evolution substrate. Finished wall to be sealed with Diaseen BKK ECO, as a breathable siloxane coating.

- Tape perimeter of windows frames and limestone sills with ProClama Solido Exo, to seal to the new insulated lime render. Tape to be applied between first and second coats of the diathonite. Seal the underside of the limestone sills to the lime render with 'Aerosanna Visconn fibre'.

Refer to 11317-005 Proposed Site plan for site drainage.  
\*Temporary foul pipe to be retained during construction.

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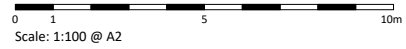
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3	28/02/2025	WIP tender set	OMS

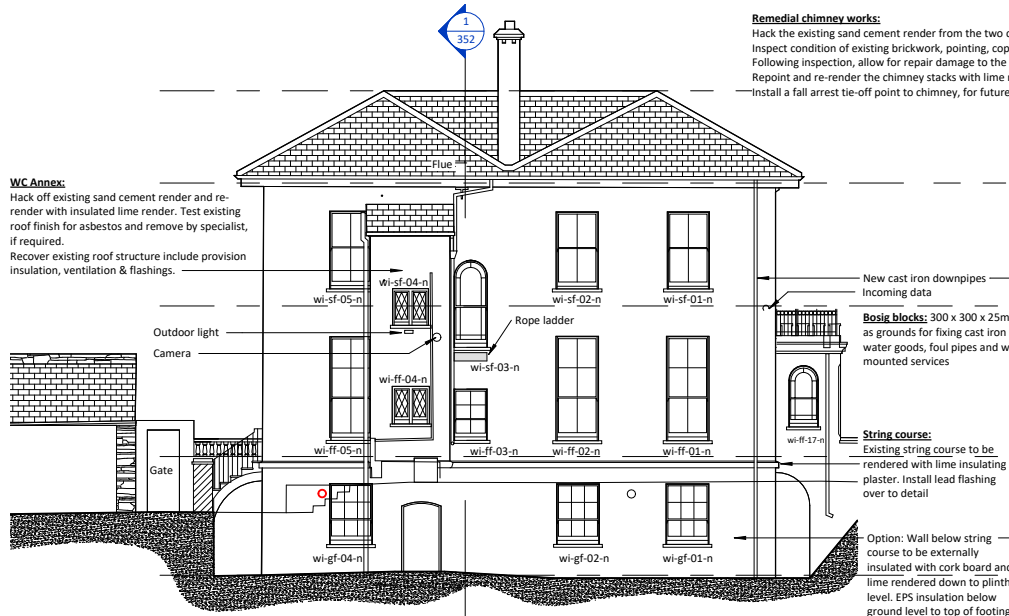
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Project:  
Lissardagh  
Lissardagh, Co. Cork



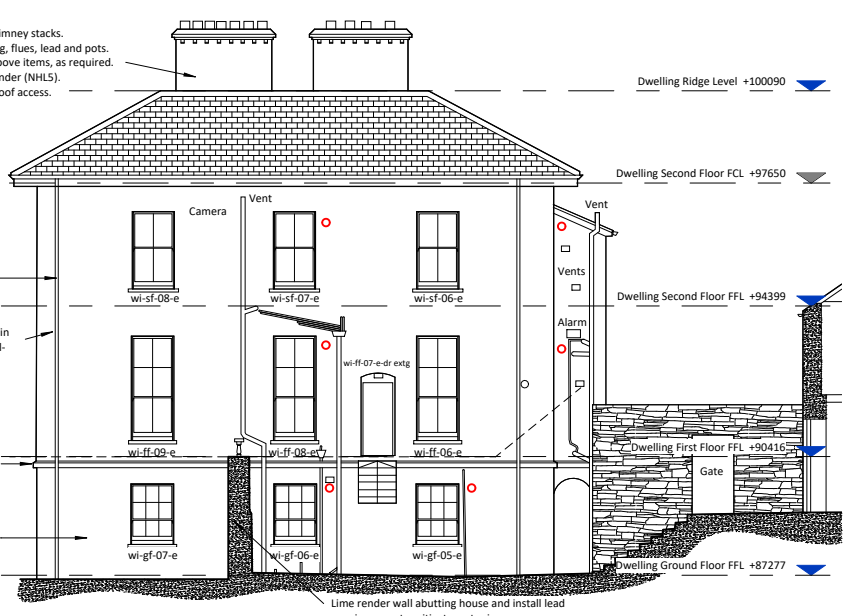
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**Dwelling-Proposed Floor Plans**

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		11317-152 3

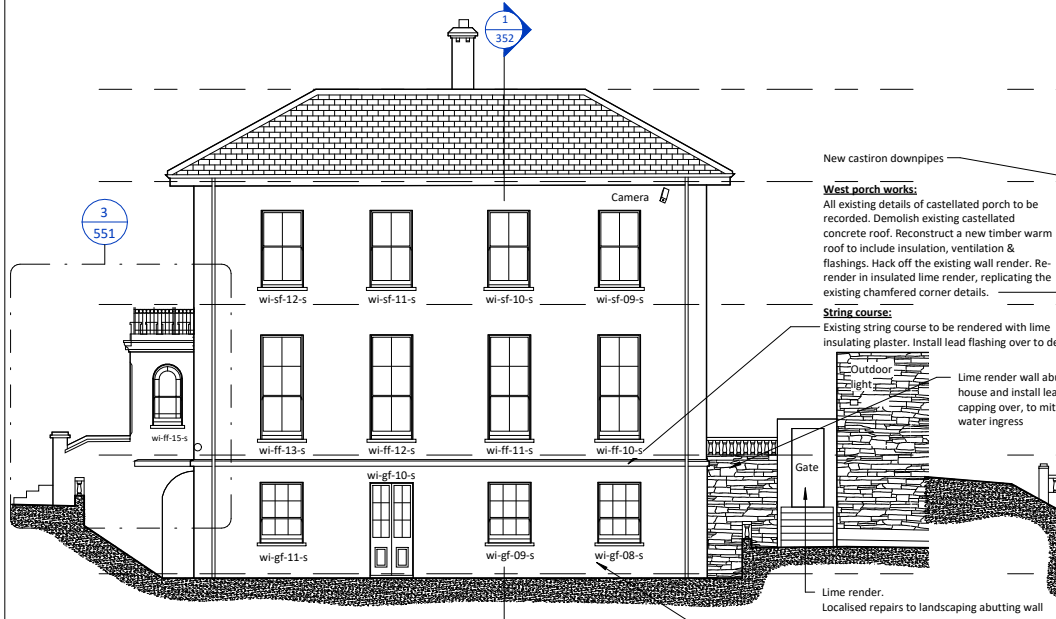




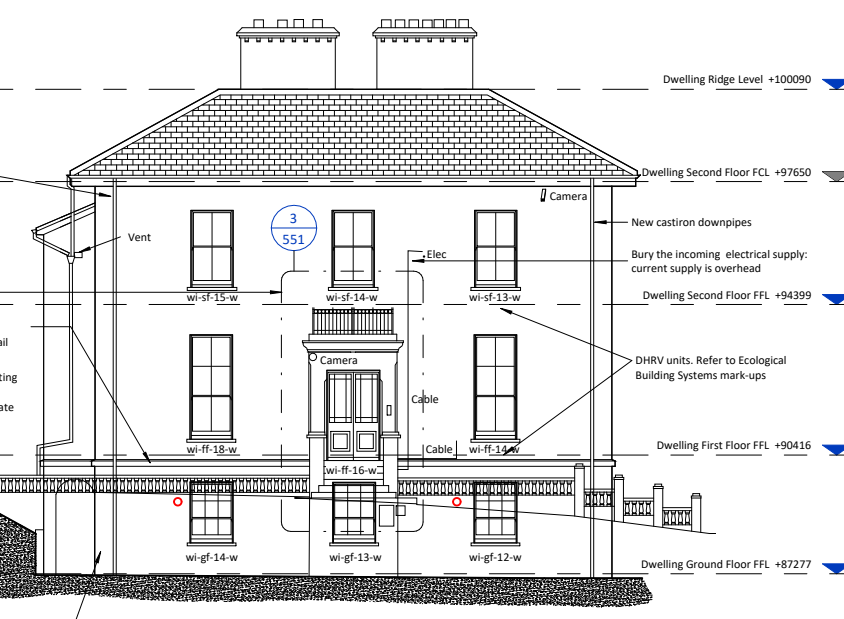
**7 Dwelling Proposed North Elevation**  
1:100



**8 Dwelling Proposed East Elevation**  
1:100



**6 Dwelling Proposed South Elevation**  
1:100

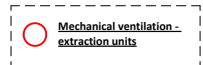


**5 Dwelling Proposed West Elevation**  
1:100

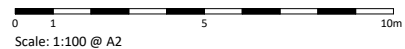
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Refer to Drawing 11317-152 for proposed specification



Rev	Date	Description	Iss. by
3	28/02/2025	WIP tender set	OMS

Revision Schedule

Client:  
**Pat O'Leary & Ann-Marie O'Brien**

Project:  
Lissardagh  
Lissardagh, Co. Cork



Drawing:  
**Dwelling-Proposed Elevations**

Scale @ A2: <b>1:100</b>	Date: <b>01/08/25</b>	Drawing No.:
Drawn: FSG	Checked: SF	Revision No.:
		<b>11317-252</b>
		<b>3</b>

# Appendix B

## Previous Survey Data

# Bat survey of Lissardagh House, Lissardagh, Co Cork



Version: 12<sup>th</sup> September 2023



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## 1. INTRODUCTION

Ecofact were commissioned to undertake a bat survey Lissardagh House, Lissardagh, Co Cork. The site location is given in Figure 1 below. The current report provides the results of a daytime inspection, emergence watch and activity survey.

### 1.1 Bat species in Ireland

There are eleven recorded bat species in Ireland, nine of which are considered resident on the island. Eight resident bat species and one of the vagrant bat species are members of the Vespertilionidae family. The ninth resident species is the Lesser Horseshoe Bat *Rhinolophus hipposideros*, which belongs to the Rhinolophidae family.

The resident Irish bat species are:

- Daubenton's bat (*Myotis daubentonii*)
- Whiskered bat (*Myotis mystacinus*)
- Natterer's bat (*Myotis nattereri*)
- Leisler's bat (*Nyctalus leisleri*)
- Nathusius' Pipistrelle (*Pipistrellus nathusii*)
- Common Pipistrelle (*Pipistrellus pipistrellus*)
- Soprano Pipistrelle (*Pipistrellus pygmaeus*)
- Brown Long-eared bat (*Plecotus auritus*)
- Lesser Horseshoe Bat (*Rhinolophus hipposideros*)

Other bat species (vagrants) recorded are:

- Brandt's bat (*Myotis brandtii*)
- Greater horseshoe bat (*Rhinolophus ferrumequinum*)

### 1.2 Legislation Relating to Bats

Bats are strictly protected under both national and international law. The purpose of this legislation is to maintain and restore bat populations within their natural range. This implies that the habitats on which they rely and the ecology of their life cycles should not be compromised by human activities. Where activities have the potential to compromise bat populations, measures are required to be put in place to avoid impacts or compensate and mitigate for those impacts. The key legislation which provides protection to bats is outlined below.

#### 1.2.1 Wildlife Act 1976

In the Republic of Ireland, all bats and their roosts are protected under Schedule 5 of the *Wildlife Act 1976* (amended 2000). It is unlawful to disturb either without the appropriate Licence.

#### 1.2.2 EU Habitats Directive

In addition to domestic legislation bats are also protected under the *EC Directive on the Conservation of Natural habitats and of Wild Fauna and Flora* (Habitats Directive 1992). This Directive seeks to protect rare species, including bats, and their habitats and requires that appropriate monitoring of populations be undertaken. All bat species are protected under Annex IV of the EU Habitats Directive,



while the lesser horseshoe bat (*Rhinolophus hipposideros*) is listed under Annex II. Member states are required to designate Special Areas of Conservation for all species listed under Annex II in order to protect them. The EU Habitats Directive has been transposed into Irish law with the European Communities (Birds and Natural Habitats) Regulations 2011.

A total of 41 SACs have been designated for the Annex II species lesser horseshoe bat (1303), of which nine have also been selected for the Annex I habitat 'Caves not open to the public' (8310).

### 1.2.3 Bern and Bonn Conventions

Ireland has also ratified two international conventions which afford protection to bats amongst other fauna. These are known as the 'Bern' and 'Bonn' Conventions. *The Convention on the Conservation of European Wildlife and Natural Habitats* (Bern Convention 1982), in relation to bats, exists to conserve all species and their habitats. *The Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention 1979, enacted 1983) was instigated to protect migrant species across all European boundaries, which covers certain species of bat.

### 1.2.4 Derogation licences

Any works interfering with bats and especially their roosts, may only be carried out under a derogation Licence granted by National Parks and Wildlife Service (NPWS) pursuant to Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish law).

The destruction, alteration or evacuation of a known bat roost is a notifiable action and can only be carried out with a derogation licence from the National Parks and Wildlife Service. Any works that might interfere with bats or their roost sites can only be carried out under licence to derogate from Regulation 23 of the Habitats Regulations 1997 and Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (which transposed the EU Habitats Directive into Irish Law). Details with regards to Appropriate Assessments, procedures and parameters under which derogation licences may be obtained are outlined in Circular Letter NPWS 2/07 '*Guidance on Compliance with Regulation 23 of the Habitats Regulations 1997 – strict protection of certain species / applications for derogation licences*' issued on the 16<sup>th</sup> of May 2007 on behalf of the Minister of the Environment, Heritage and Local Government.



Figure 1 Location of Lissardagh House, Lissardagh, Co Cork



## 2. METHODOLOGY

### 2.1 Guidelines

The survey and assessment had regard to the methodology outlined in:

- *Bat Mitigation Guidelines for Ireland v2* by Marnell *et al.*, (2022)
- *Bat Tree Habitat Key (BTHK)* by Andrews, H (2018).
- *Bat Surveys for Professional Ecologists: Best Practice Guidelines 3<sup>rd</sup> Edition* by Collins (2016)
- *Guidance on the strict protection of certain animal and plant species under the Habitats Directive in Ireland* by NPWS (2021)
- *Bat Workers' Manual 3<sup>rd</sup> Edition* by JNCC (2004) and
- *British Bat Calls: A Guide to Species Identification* (Russ, 2012).

**Table 1** Definition of bat roost types adapted from Collins (2016).

Roost Type	Definition
Day Roost	A place where individual bats, or small groups of males, rest or shelter in the day but are rarely found by night in the summer.
Night Roost	A place where bats rest or shelter in the night but are rarely found in the day. May be used by a single individual on occasion or it could be used regularly by the whole colony.
Feeding Roost	A place where individual bats or a few individuals rest or feed during the night but are rarely present by day.
Transitional/occasional Roost	Used by a few individuals or occasionally small groups for generally short periods of time on waking from hibernation or in the period prior to hibernation.
Swarming Site	Where large numbers of males and females gather during late summer to autumn. Appear to be important mating sites.
Mating Sites	Where mating takes place from late summer and can continue through winter.
Maternity Roost	Where female bats give birth and raise their young to independence.
Hibernation Roost	Where bats may be found individually or together during winter. They have a constant cool temperature and high humidity.
Satellite Roost	An alternative roost found in close proximity to the main nursery colony used by a few individual breeding females to small groups of breeding females throughout the breeding season.

### 2.2 Desk study

The bat suitability of habitat in the study area for bats was obtained using the National Biodiversity Data Centre (NBDC) database. This map provides a picture of the broad scale geographic patterns of occurrence and local roosting habitat requirements for Irish bat species. The maps are a visualization of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats (Lundy *et al* 2011). The NBDC online National Bat Database of Ireland was also accessed to review bat records in the study area.

### 2.3 Field Surveys

The was visited on the 5<sup>th</sup> of July 2023. This survey involved a daytime inspection of the site during daylight hours. The surveys involve looking for evidence of roosting bats including live bats, remains of dead bats, droppings, staining, and feeding remains.



An emergence and activity survey was undertaken following the site inspection on the 5<sup>th</sup> July 2023. The survey was completed from 30 minutes before dusk to 2 hours after dusk. The surveys involved the use of handheld bat detectors (Elekon Batscanner, Echo Meter Touch Pro 2, Anabat Express). Bat species emerging from the building and using the site were recorded. The weather conditions were ideal for the surveys and it was completed within the appropriate season.

### **3. PROJECT PROPOSAL**

The project proposal is to carry out repair works to the roof of the house. An outline scope of works has been prepared by Wain Morehead Architects. This includes a proposal for remedial roof works, remedial chimney works, works to the south façade, external landscaping, attic insulation works, works on the porch, painting works, and works on the courtyard building.



## 4. RESULTS

### 4.1 Desk Study

The National Biodiversity Data Centre (NBDC) maps landscape suitability for bats based on Lundy et al., (2011). The maps are a visualisation of the results of the analyses based on a 'habitat suitability' index. The index ranges from 0 to 100, with 0 being least favourable and 100 most favourable for bats. Table 1 below gives the suitability of the study area for the bat species found in Ireland (based on NBDC) along with their Irish Red List Status (from Marnell et al., 2009). The overall assessment of bat habitats for the current study area is given as 32, which is considered to be low. However, the rating for a number of bat species (Brown Long-eared, Soprano Pipistrelle, Common Pipistrelle, Natterer's bat) is moderate.

**Table 2** Suitability of the study area for the bat species previously recorded in the Leixlip area (based on the NBDC data). Irish Red list status also indicated (based on Marnell *et al.*, 2009).

Common name	Scientific name	Suitability index	Irish red list status
All bats		32	
Soprano pipistrelle	<i>Pipistrellus pygmaeus</i>	42	Least Concern
Brown Long-eared bat	<i>Plecotus auritus</i>	49	Near Threatened
Common Pipistrelle	<i>Pipistrellus pipistrellus</i>	40	Least Concern
Lesser Horseshoe Bat	<i>Rhinolophus hipposideros</i>	12	Least Concern
Leisler's bat	<i>Nyctalus leisleri</i>	39	Least Concern
Whiskered bat	<i>Myotis mystacinus</i>	31	Least Concern
Daubenton's bat	<i>Myotis daubentonii</i>	30	Least Concern
Nathusius' Pipistrelle	<i>Pipistrellus nathusii</i>	4	Least Concern
Natterer's bat	<i>Myotis nattereri</i>	41	Least Concern

#### 4.1.1 Previous Records

According to the National Bat Database of Ireland as viewed on the National Biodiversity Data Centre, the closest bat record is from approximately 1km southwest of the subject site and is a Daubenton's bat roost in a bridge. There is also a record of a Whiskered Bat roost located approximately 2km west of the site. There is also a record of Brown Long-eared bat roost approximately 2km southwest of the site. There are no other records in the general area of the site.

### 4.2 Field Survey

#### 4.2.1 Daytime Inspection

The subject site was visited on the 5<sup>th</sup> of July 2023. The main focus of the survey was the dwelling house onsite. Lissardagh House is a 3-storey Georgian home constructed in the mid 1800s. This house is currently lived in and there are several outbuildings on the site. An external inspection was undertaken and several potential ingress / egress points were noted. These were mainly located in the eaves of the roof, with the mostly suitable locations at the four corners. The roof hips and valleys which were visible from the ground also had some potential ingress and egress points. Due to the shape of the roof, the inner area was not visible from the ground. These areas were focused on during the emergence watch. The habitat around the house consisted of lawns, gardens, mature trees, access roads and a small courtyard. The lawns and gardens were well maintained.



## 4.2.2 Emergence Watch

Two ecologists were onsite for the emergence and activity survey. One ecologist focussed primarily on the northern side of the building and the other on the south. The temperature at the beginning of the survey was 12°C with no precipitation. Insect activity was low to moderate throughout the survey.

Dusk on July 5<sup>th</sup> was at 22.44pm and the survey commenced at 22.03pm. The first bat was recorded emerging from the southwest corner of the roof at 22.15pm. This bat, and one which emerged immediately after it were not picked up by the detectors. At 22.23pm a confirmed *Myotis* sp. was recorded emerging from this point. Following these recordings, a further 10 bats were recorded emerging. These were all *Myotis* sp. bats and it was considered that they were most likely to be Whiskered bats. *Myotis* bats are difficult to identify to species levels using detectors. Indeed, DNA sampling is required to be definite about the species.

In addition, a single bat was recorded emerging from the eave in the centre of the roof facing south prior to dusk. Another bat was recorded coming from the roof. The identification of these bats could not be confirmed. Bats also emerged from the middle of the roof to the west. On the northern side of the house there were a further 10 bats were recorded emerging. These were both *Myotis* sp. and pipistrelle species, most likely all Common Pipistrelles. In total, n=27 bats were recorded emerging from the subject building.

After emergence there was a drop in activity. The *Myotis* sp. bats immediately left the main area of the house flying along the outbuildings and into the wooded area. They were on occasion picked up around the main house after emergence. Pipistrelles were recorded in the area of the main house after emergence. Soprano Pipistrelles were commonly recorded foraging in the yard between the main house and the outbuildings. In the wider area of the site Leisler's and *Myotis* sp., were recorded during the activity survey. There is a road on the site to the south where a *Myotis* sp. bat was recorded foraging at 23.44pm. Common pipistrelles were also recorded in this area around the same time.

The building is confirmed as being a bat roost. It is being used by a significant number of *Myotis* sp. bats thought to be Whiskered bats (20+). There are also a small number of Pipistrelle bats roosting in the building. Both Common and Soprano Pipistrelles were recorded (<10). The status of the roost for *Myotis* sp. bats is not known but is likely to be a maternity roost. Whiskered bat maternity colonies usually consist of 20-60 females (Schober & Grimberger, 1990) and the numbers present at this site are at the lower end of this scale. However, male and non-breeding female Whiskered bats are usually solitary bats. Further survey work would be required to determine the status of this roost; however, it will be assumed that this is a maternity roost. Leisler's bats were also recorded during the survey but they were not roosting in the building.



## 5. IMPACTS

No works can take place on the house in the absence of a derogation licence. This would include all the works listed in the Wain Morehead Architects report, and any preparatory work.

All bats and their roosts are **strictly protected** in Ireland and listed under Annex IV of the EU Habitats Directive. The EU Habitats Directive has been transposed into Irish law with the *European Communities (Birds and Natural Habitats) Regulations (2011)* (S.I. No. 477/2011). All bat species are also protected here under the *Wildlife Act (1976)* and *Wildlife (Amendment) Act (2000)* (S.I. No. 38 of 2000). Impacts on bats may also be the subject of claims under the *European Communities (Environmental Liability) Regulations (2008)* (S.I. No. 547/2008) where bat and their roosts may have been adversely affected by unauthorised activities.

Some specific comments on the proposal are as follows:-

- Assuming weatherproofing the roof involves sealing all holes and gaps the permanent loss of the roost will occur.
- It is planned to install scaffolding on southeast corner – this is where most of the bats were observed. Works here to open the area would directly impact the ingress/egress point.
- Remedial works to slating, leadwork, hips, ridges, valleys may also remove ingress/egress points.
- CCTV is proposed to be installed on the southern wall. If this includes a sensor light near roost entry and exits this would reduce roost suitability.
- All works in the attic including insulation would result in roost no longer being used.
- Chemicals used to treat roof timbers could also cause issues.
- If any roof works are undertaken in the summer disturbance impacts from noise, increased human activity and lighting.
- Bats exiting the roof flew along the edge of the south facing outbuilding, which has a lot of ivy growth. If this was illuminated for example by lighting associated with CCTV this could cause disturbance and potential loss of the roost.

## 6. MITIGATION

- A derogation Licence under Regulation 25 of the European Communities (Natural Habitats) Regulations 1997 will be obtained for this work from the *National Parks and Wildlife Service* in advance. No work on any of the buildings can be undertaken without this licence being in place. Disturbance of a known bat roost is a notifiable action under current national and European legislation.
- No lighting, CCTV, or painting should also be completed on the house without a derogation licence and mitigation being in place.
- Internal inspections can also only be undertaken outside of the active bat season and will also require a derogation licence to be in place. Internal inspections would be required to identify areas where bats are currently roosting, and also be required to confirm bats aren't hibernating there. However, as the house is occupied it is unlikely that bats will be hibernating here as it will be too warm.
- Works can be planned for outside active bat season (e.g. October to April) and completed under a derogation licence. The best approach would be to accommodate the bats in the roof/attic in





a managed way. Internal inspections can identify areas for where artificial roost compartments could be installed. These would be closed off areas of the attic designed to limit the areas accessible by bats, but nonetheless allow bats to continue to use the roost. Two of these small “bat lofts” would be required – one for *Myotis* sp. bats and one for *Pipistrelles*. These would be closed off areas of the attic designed to be artificial roosts compartments. To facilitate access to these compartments, gaps would be left in the roof so that bats could enter. Incorporating gaps where the existing ones are would be the ideal approach to allow bats to re-enter into artificial roost compartments. An internal inspection will identify the most suitable areas for this but likely the southeast corner and other area along the eaves would be suitable. This can be done with simple gaps left in the masonry, soffit gaps, raised lead flashing or purpose-built bat entrances (Marnell *et al.* 2022). Ridge tiles and raised roofing tiles may also be incorporated.

- The designs of the access tiles and compartments would follow the Bat Mitigation Guidelines (Marnell *et al.* 2022) and would need to be designed with an ecologist.
- The small bat lofts would constitute areas cut off from the rest of the attic. This is the ideal solution as the roost is maintained but in a more managed and controlled way.
- If providing ongoing access to the attic / roof area for bats is not agreeable to the house owner, artificial roosts away from the house could be provided instead. This would have a reduced likelihood of success and would require the permanent exclusion of bats from the attic. This approach would also require a derogation licence and may include the provision of bat boxes / artificial roosts away from the house. The possible modification of one of the outbuildings could also be explored. This is not the preferred approach and it would be more difficult to get a derogation licence. But if the bats are causing issues for the homeowner, then this may have to be the option pursued.
- To support the derogation licence more surveys should ideally be undertaken. A full night and dawn swarming survey in early September would be an informative survey to complete. An out of season internal survey of the attic will also be required.
- Any chemicals and materials used inside the roof will need to be approved by an ecologist if the roof roost is to remain.
- Some additional landscaping for bats could be provided with night scented plants.
- Bat Conservation Trust & Institute of Lighting Professionals (2018) guidance may also be followed in relation to any lighting, as well as Bat Conservation Ireland’s *Bats & Lighting: Guidance Notes for Planners, Engineers, Architects and Developers* (2010).



## PLATES



**Plate 1** Eastern face of the subject house. During the activity survey a Soprano pipistrelle was often recorded foraging here.



**Plate 2** The south-eastern section of the house immediately before the survey commenced. Approximately 12 bats were recorded emerging from this corner.



**Plate 3** Western face of the subject house. Bats were recorded emerging from the roof here.



**Plate 4** The surrounding area consists of ornamental gardens, mature trees and well managed lawns.



**Plate 5** Outbuildings on the proposed development site.



**Plate 6** Sensor lighting on the proposed development site. There were sensor lights to the north and east of the house.



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# Appendix C

## Previous Derogation Licence



**NPWS**

An tSeirbhís Páirceanna  
Náisiúnta agus Fiadhúlra  
National Parks and Wildlife  
Service

**Licence No.: DER/BAT 2024 – 74**

**EUROPEAN COMMUNITIES (BIRDS AND NATURAL HABITATS) REGULATIONS,  
2011 (S.I. No 477 of 2011)**

**DEROGATION LICENCE**

Granted under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011, hereinafter referred to as “the Habitats Regulations”.

The Minister for Housing, Local Government and Heritage, in exercise of the powers conferred on him by Regulation 54 of the Habitats Regulations hereby grants to **Pat O’Leary, Lissardagh House, Lissardagh, Co. Cork** supervised by **William O’Connor, Ecofact Environmental Consultants Ltd, Tait Business Centre, Dominic Street, Co. Limerick V94 NW81**, a licence. It is stated that:

**(A)** 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.

**(B)** There is no satisfactory alternative, and the action authorised by this licence will not be detrimental to the maintenance of the population of **bats** referred to below at a favourable conservation status in their natural range.

The licence is issued in respect of the following **bat species**:

- |                              |                                  |
|------------------------------|----------------------------------|
| • <b>natterer’s bat</b>      | <b>Myotis nattereri</b>          |
| • <b>common pipistrelle</b>  | <b>Pipistrellus pipistrellus</b> |
| • <b>soprano pipistrelle</b> | <b>Pipistrellus pygmaeus</b>     |
| • <b>daubenton’s bat</b>     | <b>Myotis daubentonii</b>        |
| • <b>whiskered bat</b>       | <b>Myotis mystacinus</b>         |

This licence authorises the following:

- (a) Roost disturbance;
- (b) Actions authorised within the licence

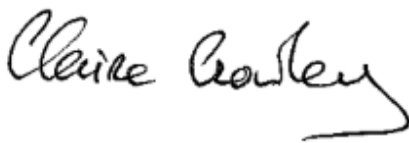
**This licence is subject to the terms and conditions set out overleaf.**

## Terms and Conditions

1. This licence is granted solely to allow the activities specified in connection with the **roof repairs** located at **Lissardagh House, Lissardagh, Co. Cork**, for **Pat O’Leary**.
2. All activities authorised by this licence, and all equipment used in connection herewith, shall be carried out, constructed and maintained (as the case may be) so as to avoid unnecessary injury or distress to any species of **BAT**.
3. This licence may be modified or revoked, for stated reasons, at any time.
4. Bats to be accommodated in the roof/attic in two artificial roost compartments, with their location to be optimised and specified following an internal inspection by a bat specialist.
5. To facilitate access by bats to these compartments, gaps will be left in the roof to specialist’s specification. The designs of the access points and of the compartments will follow the NPWS’s Bat Mitigation Guidelines (2022) and will be designed with an ecologist. Options tbc include: eg soffit gaps, raised lead flashing, purpose-built bat entrances, or raised roof/ridge tiles.
6. Any chemicals and materials used inside the roof will be bat friendly.
7. If bats are encountered during the works, the ecologist and the NPWS will be contacted immediately and works ceased. The contact details for the ecologist and the NPWS will be available to personnel onsite.
8. Security lighting will be installed (if needed) so as not to illuminate the areas of the roof where the bats enter/exit the building.
9. The mitigation measures outlined in the application report (**Bat Survey of Lissardagh House, Lissardagh, Co. Cork, pgs.10-12**), together with any changes or clarification agreed in correspondence between NPWS and the agent or applicant, are to be carried out. Strict adherence must be paid to all the proposed measures in the application.
10. The actions which this licence authorise shall be completed between the **1<sup>st</sup> October 2024** and **31<sup>st</sup> December 2024**.
11. The works will be supervised by bat ecologist **William O’Connor**.



12. If this licence addresses works that are subject of a planning application, no such works permitted under this licence can occur until planning permission is granted.
13. If this licence expires prior to works permitted under this licence commencing, a new application must be sought in advance, including the provision of any updated data or reports.
14. This licence shall be produced for inspection on a request being made on that behalf by a member of An Garda Síochána or an authorised NPWS officer appointed under Regulation 4 of the Habitats Regulations.
15. The local National Parks and Wildlife Service field officer **Declan O'Donnell**, [Declan.ODonnell@npws.gov.ie](mailto:Declan.ODonnell@npws.gov.ie) , **+353 15393396** should be contacted prior to the commencement of any activity, and if bats are detected on site during the course of the work, under the terms of this licence.
16. On completion of the activities authorised by this licence, a report must be submitted to [Wildlife.reports@NPWS.gov.ie](mailto:Wildlife.reports@NPWS.gov.ie) detailing results of works and success of mitigation within four weeks of the expiry date of this licence.
17. On completion of the actions which this licence authorises, all recordings of bat species affected will be made using the standardised data form provided below and must be submitted to the NPWS within four weeks of the expiry date of this licence. Included with the below returns form, a report will also be submitted to [Wildlife.reports@NPWS.gov.ie](mailto:Wildlife.reports@NPWS.gov.ie) detailing results of works and success of mitigation. Both documents must be submitted to constitute a licence return.



**Claire Crowley**

(a person authorised by the Minister to sign on his behalf)

**28/03/2024**

Wildlife Licensing Unit  
National Parks and Wildlife Service  
Housing, Local Government and Heritage  
R. 2.03  
90 North King Street  
Smithfield  
Dublin 7  
D07 N7CV



**NOTES (1 to 2).**

- This licence is granted for the period specified and subject to compliance with the conditions specified. Anything done other than in accordance with the terms of this licence may constitute an offence.
- This licence applies to **bats** and to no other species.



## Article 16 (Habitats Directive) - Returns Form

This returns form is for use in respect of:

*Regulation 54 – Derogation Licence to protect wild fauna and conserving natural habitats*

**Licence Number:**

**Licence Year:**

**Licence Holder:**

Species (English & Latin)	No. of Individuals Affected	No. of Breeding Places	No. of Resting Places

**Licence Holder Signature:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Returns must be emailed to the following email address:

[wildlife.reports@npws.gov.ie](mailto:wildlife.reports@npws.gov.ie)

# Appendix D

## Bat-safe Timber Treatment Information

Marketing company	Product name	Type	User	Active ingredients
Akzo Nobel Coatings Ltd	Cuprinol Trade Decorative Preserver (BP)	S	A	IPBC, Tebuconazole
Akzo Nobel Coatings Ltd	Cuprinol Trade Quick Drying Wood Preserver Clear (BP)	W	A	Propiconazole, IPBC
Akzo Nobel Coatings Ltd	Dulux Trade Weathershield Naked Wood Basecoat (BP)	W	A	Propiconazole, IPBC
Akzo Nobel Coatings Ltd	Dulux Trade Weathershield Preservative Primer + (BP)	W	A	Propiconazole, IPBC
Assured Products Ltd	Spear & Jackson Triple Action Wood Treatment	M	A	Propiconazole, IPBC, Permethrin
Assured Products Ltd	Spear & Jackson Woodworm Killer	M	A	Permethrin
Crown Paints	Sadolin Quick Dry Wood Preserver	W	A	Propiconazole, IPBC
Enviroquest GPT Ltd	Lignum Pro I62.5 (BPR)	Wc	P	Permethrin
Enviroquest GPT Ltd	Lignum Pro D156 (BPR)	Wc	P	Propiconazole, IPBC, Permethrin
Enviroquest GPT Ltd	Lignum Universal Wood Preserver (BPR)	W	A	Propiconazole, IPBC, Permethrin
Enviroquest GPT Ltd	Lignum Woodworm Killer (BPR)	W	A	Permethrin
Enviroquest GPT Ltd	Lignum Wood Preserver (BPR)	W	A	Propiconazole, IPBC, Permethrin
Enviroquest GPT Ltd	Lignum Pro Gel(BPR)	Pa	P	Propiconazole, IPBC, Permethrin
Larsen Building Products	Larsen Construction Timber Preserver	M	A	Propiconazole, IPBC, Permethrin
Larsen Building Products	Larsen Low Odour Woodworm Killer	M	A	Permethrin
Larsen Building Products	Larsen Low Odour Universal Wood Preservative	M	A	Propiconazole, IPBC, Permethrin
Morrells Woodfinishes Ltd	Omnia Preserve	W	A	Propiconazole, IPBC
Permagard Products Ltd	Permagard Woodworm Killer (BPR)	W	A	Permethrin
Permagard Products Ltd	Permagard Universal Wood Treatment (BPR)	W	A	Propiconazole, IPBC, Permethrin

PPG Agritectural Coatings UK Ltd	Johnstone's Trade Woodworks All Purpose Preserver	S	A	Propiconazole, IPBC, Permethrin
PPG Agritectural Coatings UK Ltd	Johnstone's Woodcare Wood Preserver	M	A	Propiconazole, IPBC, Permethrin
PPG Coatings Danmark A/S	Bondex Preserve II	W	A	Propiconazole, IPBC, Permethrin
Premier Q Coatings Ltd	Premier Q Woodworm Killer (BPR)	S	A	Permethrin
Premier Q Coatings Ltd	Premier Q Triple Action Wood Treatment (BPR)	S	A	Propiconazole, IPBC, Permethrin
Protim Solignum Ltd trading as Koppers	Endcoat Wood Preservative	S	A	Propiconazole
Rentokil Initial	Deadline Woodworm Treatment	W	P	Permethrin, IBPC, Tebucanazole, Propiconazole
Rentokil Initial	Woodworm Treatment Solution	W	P	Permethrin, IBPC, Tebucanazole, Propiconazole
Rentokil Initial	Woodworm Treatment Fluid	W	A	Permethrin, IBPC, Tebucanazole, Propiconazole
Rustins Ltd	Rustins Advanced Wood Preserver (BPR)	M	A	Propiconazole, IPBC, Permethrin
Safeguard Europe Ltd	Soluguard Woodworm Treatment (BPR)	M	A	Propiconazole, IPBC, Permethrin
Safeguard Europe Ltd	Soluguard Woodworm and Rot Treatment (BPR)	M	A	Propiconazole, IPBC, Permethrin
Sherwin-Williams Diversified Brands Ltd	Ronseal Total Clear Wood Preserver (MP)	S	A	Propiconazole, IPBC, Permethrin
Sherwin-Williams Diversified Brands Ltd	Ronseal Woodworm Killer (MP)	S	A	Permethrin
Sherwin-Williams Diversified Brands Ltd	Ronseal Multi-Purpose Woodworm Treatment (MP)	S	A	Propiconazole, IPBC, Permethrin
Sherwin-Williams Diversified Brands Ltd	Ronseal Multi-Purpose Woodworm Treatment (LC)	S	A	Propiconazole, IPBC, Permethrin
Sovereign Chemicals Ltd	Sovaq Woodworm Killer (BPR)	Mc	P	Permethrin
Sovereign Chemicals Ltd	Sovereign Boron Timber Rod	R	P	Disodium octaborate

Sovereign Chemicals Ltd	Deepkill Timber Preservative Cream	Pa	A	Propiconazole, IPBC, Permethrin
Sovereign Chemicals Ltd	Sovaq Dual Purpose Timber Treatment	Mc	P	Propiconazole, IPBC, Permethrin
Sovereign Chemicals Ltd	Sovereign Timber Preservative	S	A	Propiconazole, IPBC
STV International Ltd	Defenders Triple-Action Timber Protector	M	A	Propiconazole, IPBC, Permethrin
STV International Ltd	Zero In Woodworm Destroyer	M	A	Permethrin
Troy UK	TWP 085	W	A	Propiconazole, IPBC
Troy UK	TWP 077	S	A	Propiconazole, IPBC
Wykamol Group Ltd	Microtech Dual C RTU (BPR)	M	A	Propiconazole, IPBC, Permethrin
Wykamol Group Ltd	Microtech Woodworm RTU (BPR)	M	A	Permethrin
Wykamol Group Ltd	Microtech Dual P RTU (BPR)	M	A	Propiconazole, IPBC, Permethrin

**Type of product:**

A - aerosol

Mc - micro emulsion concentrate, to be diluted with water to form a micro emulsion

Pa - bodied paste

R - solid rod, for insertion into pre-drilled hole

S - solvent-based

W - aqueous solution, ready for use

Wc - aqueous solution concentrate, to be diluted with water

**Type of user:**

P - professional - only people required to use pesticides as part of their work and who have received appropriate information, instruction and training can use the product

A - amateur - the general public can use the product

IPBC is an abbreviation for 3-iodo-2-propynyl n-butylcarbamate.

[Use the HSE number to check product details in the COPR database.](#)

Source: <https://www.gov.uk/government/publications/bat-roosts-insecticides-and-timber-treatments/timber-treatment-products-suitable-for-use-in-or-near-bat-roosts>