NOTE TO FILE

JBA Project Code	2025s0382
Contract	Sixmilebridge - Bat Survey (House)
Client	Emma Fitzpatrick
Day, Date and Time	7th August 2025
Author	Mia Heigh
Reviewer / Sign off	Anne Mullen
Subject	Derogation License Supporting Information

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1 Introduction

1.1 Project Objective

The objective of the proposed works is the renovation and extension of a structurally compromised historic cottage located in Castlecrine, Co. Clare. The building, which dates back to the 1830s, is intended for personal residential use. The works include the repair and replacement of the roof, internal structural stabilisation, demolition of adjacent sheds, construction of an extension replacing the sheds, installation of a new sewerage treatment system, and the creation of a new site entrance.

Due to the confirmed presence of a Lesser Horseshoe Bat roost within the attic space of the cottage, the proposed development requires a derogation under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). The roost is considered a satellite roost within a wider network of known roosts in the area. The derogation application is supported by a comprehensive mitigation strategy, including the construction of a purpose-adapted alternative roost.

1.2 Ecology Team

Prepared by:

Mia Heigh, BSc – Assistant Ecologist

Mia holds a BSc in Zoology and has +2 years' experience in ecological surveying, bat emergence monitoring, bat mitigation measures, and static detector analysis. Mia Heigh conducted surveys under NPWS Bat Survey Licence No. 2025-234 & 2025-235 and Photography Licence No. 028/2025, issued for the 2025 season.

She conducted the field surveys and prepared the bat report and supporting documentation for this application. Mia has authored previous bat survey reports and successful derogation licence applications across Ireland.

Reviewed and Authorised by:

Anne Mullen BSc MSc – Senior Ecologist and Project Manager

Anne is a senior ecologist with extensive experience in bat ecology, licensing, and mitigation design. She holds a bat survey licence (No. 2025-234) issued by the National Parks and Wildlife Service and has overseen a number of projects involving Annex species. Anne supervised the survey work and authorised the final report.

All survey work was conducted in accordance with the Bat Conservation Trust's *Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition)* (Collins 2023) and the *Bat Mitigation Guidelines for Ireland* (Marnell et al. 2022).

2 Background

The proposed activity involves the renovation and extension of a historic cottage located in Castlecrine, approximately 2.5km northeast of Sixmilebridge, Co. Clare. The property is privately owned and has been in a state of structural decline for several years. The building dates back to at least the 1830s, as confirmed by OSI historical mapping (publically available) is currently uninhabitable due to partial roof collapse and significant internal deterioration.

The site comprises of improved agricultural grassland, mature hedgerows, and three deteriorated structures, including the main cottage and two outbuildings. The surrounding landscape supports a network of known Lesser Horseshoe Bat roosts in the wider area, but is at distance from SAC designated roosts.

The planning application for the renovation was submitted to Clare County Council in late 2024. In response, the Council issued a request for further ecological information, prompting the commissioning of bat surveys by JBA Consulting. These surveys confirmed the presence of a satellite roost of Lesser Horseshoe Bats within the attic of the cottage.

The proposed development is consistent with national and local planning policy objectives, including the reuse of existing housing stock, rural regeneration, and the conservation of built heritage. The site is not zoned for development under a specific Local Area Plan but is located in a rural area where sustainable residential development is supported under the Clare County Development Plan. The development will be in receipt of the vacant/derelict buildings grant.

Due to the presence of a protected species, the proposed works require a derogation under Regulation 54 of the European Communities (Birds and Natural Habitats) Regulations 2011 (as amended). The application is supported by a detailed mitigation strategy to ensure compliance with conservation legislation and the continued protection of the local bat population.

3 Proposed Works Covered by Derogation

The proposed activity involves the renovation and extension of a historic cottage located in Castlecrine, Co. Clare. The works are necessary to make the building structurally safe and suitable for residential use. The cottage is currently uninhabitable due to partial roof collapse and internal instability. The attic space has been confirmed as a satellite roost for Lesser Horseshoe Bats (*Rhinolophus hipposideros*). 12-15 LHB bats were recorded emerging.

The scope of works includes:

- Removal of the existing galvanised steel roof and collapsed thatch
- Structural stabilisation and internal refurbishment of the cottage
- Demolition of two adjacent sheds
- Installation of a new sewerage treatment system
- Creation of a new site entrance
- Landscaping and associated site works

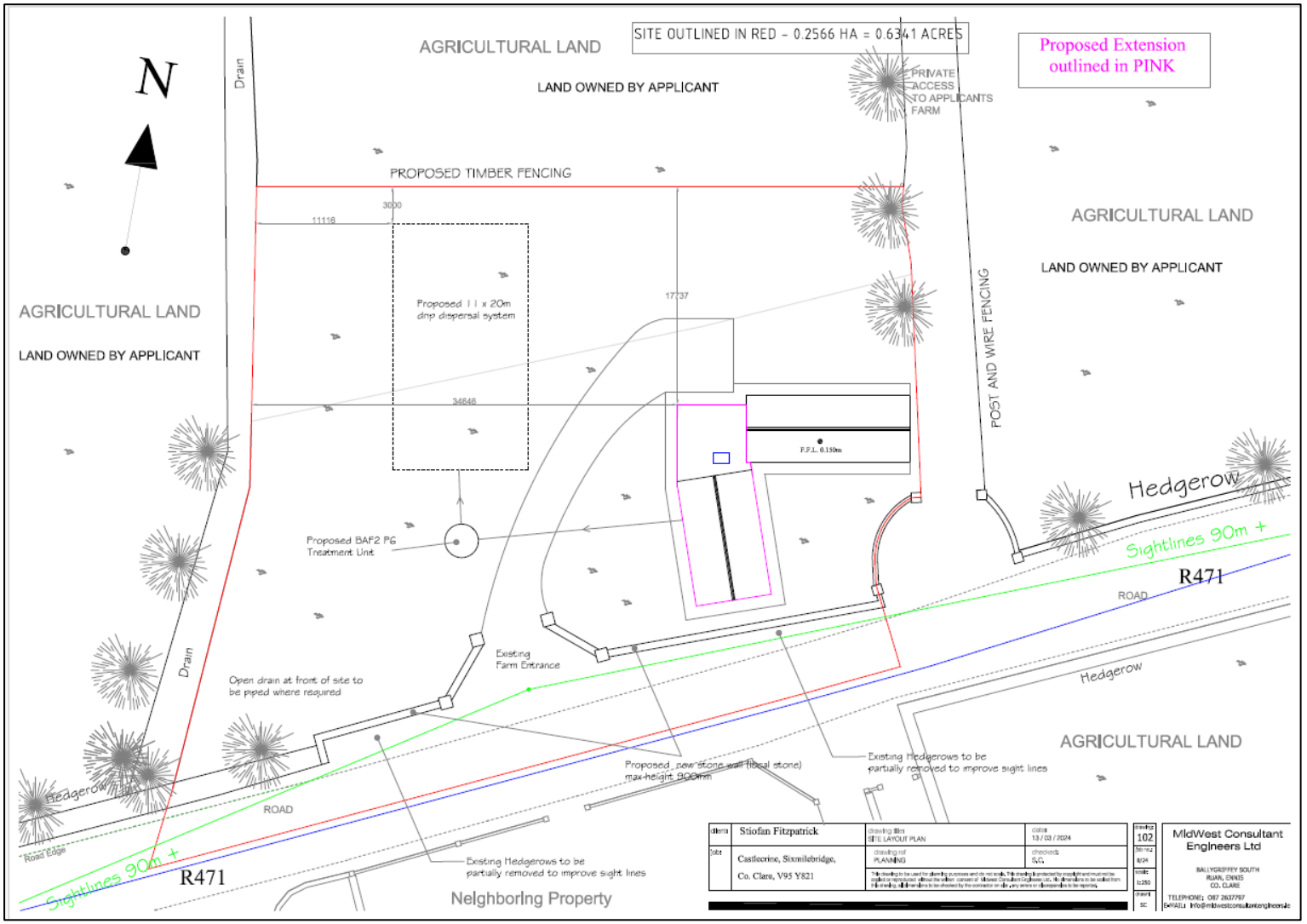
The site plan (Figure 1-1 of the bat report) illustrates:

- The footprint of the existing cottage and sheds
- The location of the proposed alternative roost structure, to be constructed prior to any disturbance
- The proposed new entrance and sewerage system
- The surrounding habitat features, including mature hedgerows and treelines

The site is situated along the R471 in the townland of Castlecrine, approximately 2.5 km northeast of Sixmilebridge. It comprises improved agricultural grassland and mature boundary vegetation.

The proposed roof replacement will be carried out under strict ecological supervision and in accordance with the conditions of the derogation licence.

NOTE TO FILE


N
Drain
AGRICULTURAL LAND
SITE OUTLINED IN RED – 0.2566 HA = 0.6341 ACRES
Proposed Extension outlined in PINK
LAND OWNED BY APPLICANT
PRIVATE ACCESS TO APPLICANTS FARM
PROPOSED TIMBER FENCING
3000
11116
17737
34848
Proposed 11 x 20m dnp dispersal system
AGRICULTURAL LAND
LAND OWNED BY APPLICANT
POST AND WIRE FENCING
AGRICULTURAL LAND
LAND OWNED BY APPLICANT
F.F.L. 0.150m
Hedgerow
Proposed BAF2 PG Treatment Unit
Sightlines 90m +
R471
ROAD
Drain
Existing Farm Entrance
Open drain at front of site to be piped where required
Hedgerow
Proposed new stone wall (local stone) max-height 900mm
Existing Hedgerows to be partially removed to improve sight lines
AGRICULTURAL LAND
Hedgerow
Road Edge
Sightlines 90m +
R471
ROAD
Existing Hedgerows to be partially removed to improve sight lines
Neighboring Property
Stiofan Fitzpatrick
Castlecrine, Sixmilebridge, Co. Clare, V95 Y821
SITE LAYOUT PLAN
PLANNING
13 / 03 / 2024
S.G.
102
1:250
MidWest Consultant Engineers Ltd
BALLYGRIFFY SOUTH
RUAN, ENNIS
CO. CLARE
TELEPHONE: 087 2637797

4 Ecological Surveys and Site Assessment

4.1 Pre-existing Data

Historical records from the National Biodiversity Data Centre (NBDC) and NPWS databases confirm the presence of Lesser Horseshoe Bats within 2.5km of the site. Two known roosts are located to the north; one hibernation roost and one maternity roost. The site itself was previously surveyed in the late 1990s, with bat droppings found, indicating a night roost.

4.2 Status of Species

The Lesser Horseshoe Bat (*Rhinolophus hipposideros*) is one of Ireland's most conservation-sensitive bat species. It is listed under Annex II and Annex IV of the EU Habitats Directive. The species is also protected under the Wildlife Acts 1976 (as amended) and is included in Appendix II of both the Bern and Bonn Conventions.

Although the species is currently classified as Least Concern on the Irish Red List, its distribution is geographically restricted, with strongholds in the western counties, including Clare. The species is highly dependent on a network of roosts—maternity, satellite, and hibernation sites—and on well-connected foraging habitats such as woodland, scrub, and sheltered river corridors (Vincent Wildlife Trust and NPWS 2022).

4.3 Survey Objective

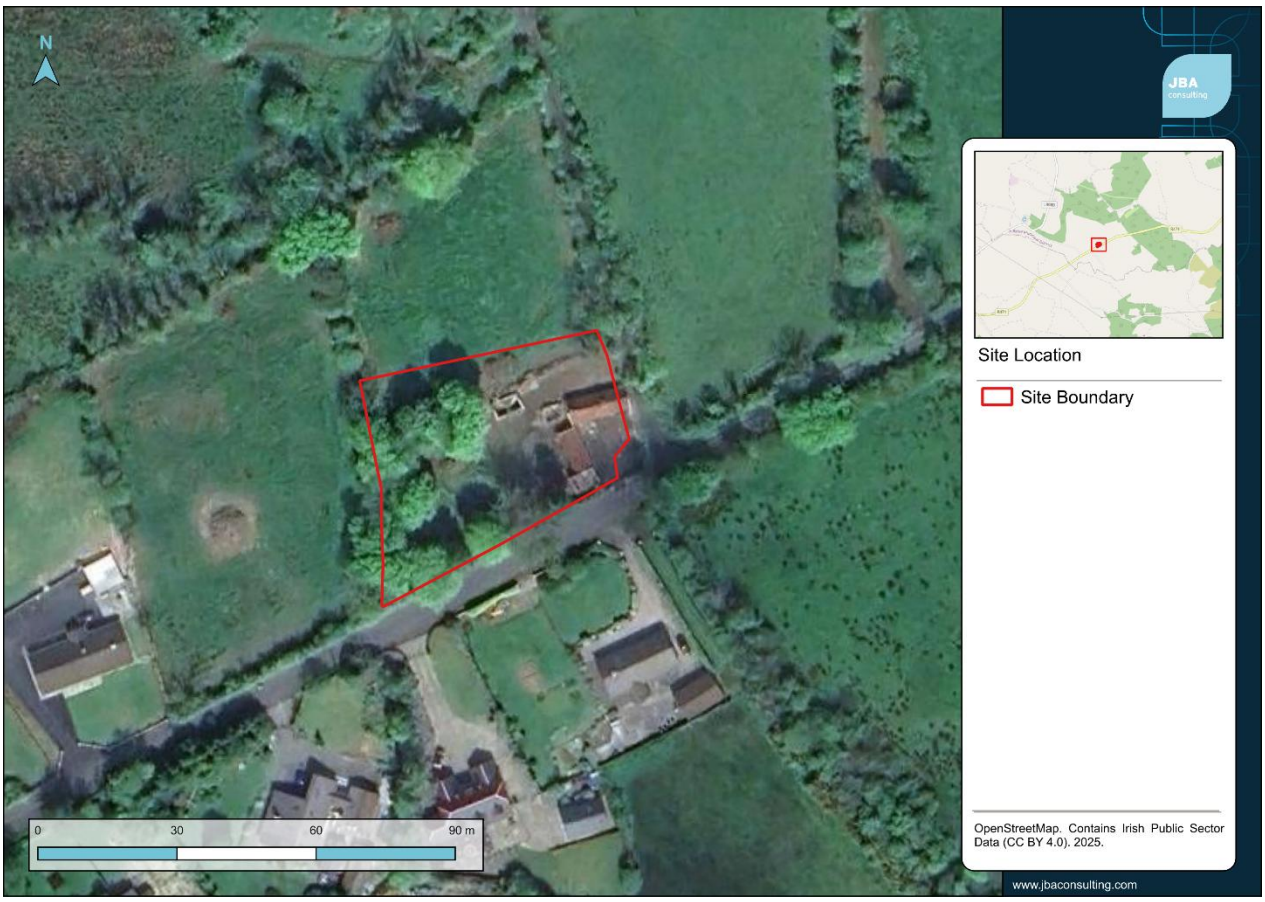
The objectives of the surveys carried out were:

- To confirm the presence or absence of bat roosts within the structures on site.
- To identify the species present and assess the nature and conservation value of any roost.
- To inform mitigation measures required for the proposed development.
- To support a derogation license application under Regulation 54.

4.4 Survey Area

The survey area included:

- A historic cottage with a partially collapsed roof and retained thatched beneath galvanised sheeting.
- Two adjacent sheds with limited roosting potential.
- Surrounding improved agricultural grassland, mature hedgerows and treelines.
- The attic space of the cottage, which was identified as the primary roosting location.



4.5 Methodology

Surveys were conducted between April and July 2025 and included:

- **Daytime Roost Inspection (3 April):** Visual inspection of internal and external features for signs of bat activity. No attic hatch is present within the building for easy of head and shoulders inspection.
- **Emergence Surveys (30 April and 8 July):** Dusk surveys using thermal imaging and bat detectors to observe emergence behaviour.
- **Static Monitoring (26 May – 3 June):** Deployment of Anabat Swift detectors in the attic to record echolocation calls.

Best Practice Compliance:

- Methodology followed the Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition) (Collins, 2023).
- Mitigation planning aligned with Bat Mitigation Guidelines for Ireland – V2 (NPWS, 2022).

Survey Conditions:

- Weather was clear and mild during emergence surveys.

- Equipment included Magenta Bat Detectors Mk5, Pulsar Axion 2 thermal monocular, and Anabat Chorus static detectors.

Limitations:

- The attic space was not accessible to JBA Ecologists due to safety concerns and limited access. Roosts may be hidden within inaccessible cavities.
- No attic hatch is present within the building for easy of head and shoulders inspection.
- Activity outside the survey period was inferred using the precautionary principle.

4.6 Survey Results

Emergence Surveys: Confirmed active use of the cottage by Lesser Horseshoe Bats. Approximately 12–15 individuals were observed emerging during the July survey. No Pipistrelles were recorded emerging.

Static Monitoring: Over 1,200 echolocation calls recorded, confirming regular use of the attic space. Activity was recorded across multiple nights but was quite variable in the numbers of calls recorded, and was declined by the final night of monitoring.

Date	26/05	27/05	28/05	29/05	30/05	31/05	01/06	02/06	03/06
Common Pipistrelle	4	0	0	0	0	0	0	0	0
Soprano Pipistrelle	2	0	0	0	0	0	0	0	0
Lesser Horseshoe	416	368	52	205	45	74	88	24	8
Totals	**422**	**368**	**52**	**205**	**45**	**74**	**88**	**24**	**8**

Other Species: Common and Soprano Pipistrelles were recorded commuting and foraging along site boundaries.

4.7 Population Size Class Assessment

Based on emergence counts and call data, the roost supports a small satellite population of Lesser Horseshoe Bats, estimated at 12–15 individuals. This is consistent with satellite roosts used seasonally by small groups in proximity to maternity sites.

5 Evidence to Support the Derogation Tests

5.1 Test 1 – Reason for Derogation

The proposed renovation of the cottage at Castlecrine is justified on the grounds of overriding public interest, both in terms of public safety and broader social and environmental benefit. The structure is a historic rural dwelling dating back to the 1830s, and it is currently in a state of advanced disrepair. The roof has partially collapsed, and the walls of the building are unstable, as documented in the figure below. Without intervention, the building is at imminent risk of collapse, particularly during adverse weather conditions. Such an event would not only endanger human safety but also result in the uncontrolled destruction of a confirmed Lesser Horseshoe Bat roost.

The cottage is intended for personal residential use, and its restoration supports national and local planning objectives related to rural housing, heritage conservation, and sustainable development. The project contributes to the reuse of existing housing stock and the revitalisation of rural communities, which are recognised as priorities under the County Clare Development Plan. Restoration is partially funded by the Vacant/Derelict Properties Grant.

Importantly, the proposed works are designed not only to avoid harm to the existing bat roost but to support the species' long-term conservation. Rather than constructing a new structure, JBA Consulting proposes the adaptive reuse of a derelict building on site (see figure below). This structure will be reroofed and refurbished to function both as a like-for-like alternative roost and a practical shed. Although located near the main construction area, it will be completed and operational before any disturbance to the current roost occurs. This approach ensures the protection of the species while maintaining the ecological integrity of the site, reflecting a balanced and responsible strategy that integrates development needs with biodiversity conservation.

Figure 5-1: Ruined structure to be converted into shed/bat roost alternative.

In this context, the public interest in preserving life, property, and cultural heritage – combined with the proactive conservation measures – clearly outweighs the temporary and mitigated impact on a species under strict protection.

5.2 Test 2 – Absence of Alternative Solutions

A thorough assessment of alternatives was undertaken as part of the planning and ecological review. The option of leaving the structure untouched was considered but is not viable. The building is structurally unsound and poses a risk of collapse. If no action is taken, the roost will be lost in an uncontrolled manner, without any mitigation or monitoring. The outcome would be more detrimental to the species than a managed intervention.

Avoiding works to the roost area was explored. However, the roost is located within the attic space of the cottage, which is integral to the structure and cannot be isolated from the necessary repairs. Attempting to retain the roost in situ while carrying out works would expose the bats to significant disturbance and risk of injury and would not meet the legal requirement to avoid harm to protected species. Provision for attic space within the renovated cottage was considered, but was considered unlikely to be utilised, as LHB rarely used occupied domestic dwellings.

Relocation of the development is not feasible. The project involves the renovation of an existing historic dwelling on a fixed site. The applicant is not proposing a new build but the restoration and extension of a long-standing structure for personal use. The location is intrinsic to the project and cannot be altered.

Given these constraints, the only satisfactory solution is to proceed with the works under licence, with mitigation in place. This approach ensures compliance with legal obligations and delivers a net benefit for both people and wildlife.

5.3 Test 3 – Impact of a Derogation on Conservation Status

The roost within the cottage has been confirmed as a satellite roost used by approximately 12-15 Lesser Horseshoe Bats. Satellite roosts play a critical role in the ecology of the species, providing temporary shelter and supporting the flexibility and resilience of local populations. The site is likely to be part of network of maternity and satellite roosts in the wider area.

To ensure the conservation status of the species is not adversely affected, a robust mitigation strategy has been developed. Central to this is the adaptive reuse of a derelict structure on site. The shed will be reroofed and refurbished to serve as both as an alternative roost and a functional shed. The final plans for the shed are not available at this time, as an assessment of the structure of the walls to support a roof has not yet been completed but it is considered that either a galvanised roof with a hot box (as per species action plan) or a slate roof with an enclosed attic space and access point are acceptable.

Figure 5-2: Hotbox under galvanised, as outlined in the LHB species action plan, or preferentially, an access point within the new roof space of the shed to allow access for LHB bats. Both options are considered acceptable, and will depend on the structural integrity of the walls of the shed.

The attic of the shed will be designed to replicate the thermal and structural conditions of the existing roost, providing a secure and suitable environment for bats. For an enclosed attic an internal attic hatch will also be incorporated to facilitate monitoring by NPWS or a licensed ecologist. The modified entrance will be to the rear of the building to allow access to a dark area, and will be 25 x 25cm in size.

Roof removal will take place between September and March and will be carried out under the supervision of a licensed bat ecologist using soft demolition techniques. Bat Specialist Susan Kerwin, in conjunction with JBA Consulting, will facilitate a soft demolition. Any capture/handling of bats will be done so by Susan Kerwin under a Section 23 licence. Additional measures include retention of mature hedgerows and treelines and implementation of bat-friendly lighting.

Given the scale of the roost, the presence of nearby non-SAC maternity and satellite roosts, and the robust mitigation proposed, the derogation is not expected to result in a negative impact on the conservation status of the Lesser Horseshoe Bat at the local or regional level. On the contrary, the creation of a secure, purpose-adapted roost may enhance the resilience of the local population and contribute positively to its long-term viability.

6 Monitoring Impacts

The Lesser Horseshoe Bat roost within the attic of the Castlecrine cottage was first recorded in the late 1990's, when droppings were found during a site inspection, indicating use as a night roost. The recent surveys conducted by JBA in 2025 have confirmed continued use of the site, with emergence counts of 12-15 individuals and over 1200 echolocation calls recorded during static monitoring. This confirms the site's function as a satellite roost within a wider network of known roosts in the region.

The guidelines suggest that no monitoring of satellite roosts are required as part of the development. Access is provided for monitoring within the designs either by ladder to the hotbox or by provision of an attic hatch. This may be a suitable site for NPWS monitoring, given the historical and current evidence of roosting activity this would provide long-term data on roost usage and effectiveness of mitigation measures implemented as part of the derogation. The site's proximity to a maternity roost and satellite site, combined with its confirmed seasonal use, makes it ecologically significant for the local population. It would also support broader conservation objectives under the Habitats Directive and contribute to the maintenance of favourable conservation status for the species.

The applicant and ecological team are committed to facilitating access for NPWS representatives and to sharing post-construction monitoring data collected over the two-year period following completion of works. Bat Specialist Susan Kerwin has also agreed to aid JBA in monitoring. This collaborative approach ensures transparency, supports adaptive management, and strengthens the evidence base for future conservation planning.