



**DALCOUR
MACLAREN**

Global Centre of Rail Excellence

Phase 1A

2022 Bat Survey Report

October 2022



Project Details

Project Name	GCRE Planning Conditions
Scheme Number	21006904
Report Number	001

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Appendices

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1 Summary

- 1.1.1 The Global Centre of Rail Excellence (GCRE) is a rail testing centre project that will be delivered by GCRE Ltd on behalf of the Welsh Government on the Onllwyn Coal Washery site (at approximate Ordnance Survey Grid Reference (OSGR) SN 84698 10547).
- 1.1.2 Phase 1A of the proposed works is contained within the northern extent of the Washery site and includes construction of rolling stock storage sidings, along with supporting 25 kV overhead line infrastructure.
- 1.1.3 Arup previously carried out building inspections and bat emergence surveys at the site in 2019 (Arup 2020) and BSG Ecology were commissioned in August 2022, to update the surveys of buildings in relation to Phase 1A of the GCRE development .
- 1.1.4 Inspections to assess the suitability to support roosting bats of 8 buildings / structures were undertaken in June and August 2022. Two buildings (28 and 31) were no longer present.
- 1.1.5 One building was categorised as having moderate potential for roosting bats and two buildings were assessed as having low suitability. The remaining five buildings had negligible suitability.
- 1.1.6 Bat emergence surveys were carried out on the buildings / structures with low or moderate suitability for roosting bats in August and September 2022. No bat roosts were recorded during the work.
- 1.1.7 Common pipistrelle (*Pipistrellus pipistrellus*), soprano pipistrelle (*Pipistrellus pygmaeus*) noctule (*Nyctalus noctula*) and Myotis species were recorded using the site for foraging or commuting. Common and soprano pipistrelle were the most frequently recorded species across the site.
- 1.1.8 The building B7 has been assessed as having a moderate suitability to support roosting bats and as a precautionary measure, the demolition of this building should be carried out under the licenced method statement that will be required for the buildings containing confirmed roosts in Phase 2A of the Site (as detailed in a separate report for Phase 2A, DM 2022). The buildings B6A and B8, which have low suitability to support roosting bats, should also be checked by a suitably experienced ecologist immediately prior to demolition to confirm likely absence of roosting bats.
- 1.1.9 There is potential for Phase 1A works in the west of the site to disturb any bat roosts that may be present in the Bridge (in the Phase 2A

area, and detailed in a separate report, DM 2022). The Bridge has been assessed as having high potential to support roosting bats. The bridge also has potential to support hibernating bats and therefore no work should commence in this area until hibernation checks of the Bridge are completed.

- 1.1.10 Other buildings and structures within the Phase 2A site, are detailed within a separate report; including other brick structures which require further survey effort. The Phase 2A report (DM 2022) should be read alongside this report.
- 1.1.11 Appropriate compensation for the loss of suitable roosting resources as a result of the proposed works will be agreed with Natural Resources Wales (NRW) during the licence application process for the Phase 2A works.
- 1.1.12 The proposed works have potential to have a negative impact on bats through reduction of foraging opportunities due to habitat loss and disturbance, or severance of commuting flight lines, by increased light levels. The Ecological Protection Plan for the Phase 1A Site (DM 2022) should set out appropriate controls for reducing the impacts of light spill on foraging and commuting bats during the construction phase.

2 Introduction

2.1 Description of project

- 2.1.1 The Global Centre of Rail Excellence (GCRE) is a rail testing centre project that will be delivered by GCRE Ltd on behalf of the Welsh Government. The GCRE site occupies 475 hectares of land within and surrounding the Nant Helen Surface Mine and Onllwyn Coal Washery (approximate central Ordnance Survey Grid Reference (OSGR) SN 84698 10547). It is located within the counties of Powys and Neath Port Talbot.
- 2.1.2 The first phase of the development, “Phase 1A”, is contained within the northern extent of the Onllwyn Coal Washery site and will involve the construction of rolling stock storage sidings, along with supporting 25 kV overhead line infrastructure. The proposed extent of the Phase 1A ‘Site’ is illustrated on Figure 1 in Appendix 1.

2.2 Background to commission

- 2.2.1 Ove Arup & Partners Ltd (Arup) carried out bat emergence /return to roost surveys within the Phase 1A Site in 2019 to inform an assessment of impacts as part of the Environmental Impact Assessment (EIA) process. These surveys are detailed within the GCRE Project’s Environmental Statement (Arup 2020).
- 2.2.2 BSG Ecology were commissioned by Dalcour Maclaren in August 2022 to update the bat survey data for buildings affected by the Phase 1A works, and to inform the scope of the Ecological Protection Plan (DM, 2022) and Phase-specific Biodiversity Plan for the Site.

2.3 Aims of study

- 2.3.1 This report sets out the findings of bat survey work carried out within/adjacent to the Phase 1A site in 2022. The aim of the surveys was to update the bat survey data for buildings affected by the Phase 1A works, and to determine the presence or likely absence of roosting bats.

3 Methods

3.1 Field survey

- 3.1.1 A total of eight buildings / structures within the Phase 1A Site were inspected by Becky Gibbs and Jo Conway on 16 June and 27 June 2022 (full details of the buildings and locations are provided on **Figure 1** and in **Appendix 2**). These included four buildings / structures within the Phase 1A Site that were surveyed by Arup in 2019¹, and four buildings identified by Dalcour Maclaren Which are within 60m of the Phase 1A Site.
- 3.1.2 The surveys were carried out alongside survey of buildings and structures with Phase 2A of the development (reported separately, DM 2022). All inspections were completed in accordance with industry standard guidance (Collins, 2016).
- 3.1.3 Features potentially providing access into the interior of the buildings or other cavities, including lifted or broken tiles, gaps in walls, window frames, soffits or weather-boarding, were inspected from ground level for evidence of bats (such as staining from fur or the presence of droppings) using a high-powered torch and close-focussing binoculars.
- 3.1.4 Building interiors were inspected as far as it was possible to do safely from ground-level. Coal processing and storage buildings were not accessed, but the interiors viewed from doorways and windows. Where cavities were accessible, these were inspected by use of an endoscope.
- 3.1.5 The buildings were assigned a category indicating the suitability of potential roost features (PRFs) for roosting bats in accordance with **Table 1**.

Table 1: Categories of bat roost suitability of features within buildings (as adapted from Collins, 2016).

Level of roost suitability	Rationale
Low	A feature that could be used by individual bats opportunistically and unlikely to be used for breeding and/or hibernation.
Moderate	A feature that could be used by bats due to its size, shelter, protection and surrounding habitat but unlikely to support a roost of high conservation significance.
High	A feature that is obviously suitable for use by larger numbers of bats on a more regular basis due to its size, shelter, protection and surrounding habitat.
Confirmed Roost	Presence of bats or evidence of recent use by bats.

3.2 Emergence survey

- 3.2.1 Emergence surveys of buildings and structures that were assessed as having low, moderate or high suitability, following the inspection, were completed with reference to guidelines from the Bat Conservation Trust (BCT) survey guidance (Collins, 2016).
- 3.2.2 Surveys were undertaken on two dates in August 2022 (see **Table 2**). Surveyors were positioned to observe all PRFs identified during the building inspection surveys, with observations supplemented by infra-red or thermal imaging cameras.
- 3.2.3 The camera equipment used on the surveys were:
- FLIR T650 high resolution thermal imaging camera.
 - Canon XA-45 infrared camera with a Nightfox XB5 infrared torch.
 - Sony DCR-SR35e Nightshot video camera with a Nightfox XB5 infrared torch.
- 3.2.4 Each surveyor used a full spectrum Anabat Scout bat detector to supplement visual observations and for recording calls for subsequent identification.
- 3.2.5 Surveyors noted any bat activity heard or seen (including emergence or re-entry) on an annotated plan. Field notes included a record of the time of each bat encounter, allowing records to be cross-referenced with the recorded data.
- 3.2.6 Dusk emergence surveys started 15 minutes before sunset and continued for a minimum of 1.5 hours after sunset. These timings are in line with industry standard guidance (Collins, 2016) and cover the peak times when bats are likely to be leaving their roosts.
- 3.2.7 Details of the survey dates, times and weather conditions are provided in **Table 2**, and the buildings and structures that were surveyed on each date are presented in **Table 3**.

Table 2: Survey dates, times and weather conditions.

Date (2022)	Survey Times			Temperature		Wind Speed*		Precipitation		Cloud cover**	
	Start	End	Sunset	Start	End	Start	End	Start	End	Start	End
08 August	20:37	20:52	20:54	21	17	2	1	0	0	0/8	0/8
22 August	20:09	21:54	20:24	18	17	1	1	0	0	8/8	8/8

*Beaufort scale (an empirical measure for describing wind intensity based on observed sea conditions. 3Bft = 8-12 mph).

**Okta scale (an estimate of how many eighths of the sky are covered in cloud, ranging from 0 oktas (completely clear sky) through to 8 oktas (completely overcast)).

Table 3: Details of buildings/structures surveyed and surveyors.

Building/ Structure ID	Date of survey (2022)	Surveyors*
B6A	08 August	JC
B7	08 August	KR + JAG
	22 August	RP
B8	22 August	GL

* GL = Gareth Lang, JC = Jo Conway, KR = Kristy Rogers, RP = Rachel Potter, SC = Siwan Clifford, AC = Alice Connell, BG = Becky Gibbs, JAG = James Garside

3.3 Data analysis

- 3.3.1 Bat calls were analysed using Analook W software and labelled according to species to cross reference with surveyor records. The species analysis follows the call parameters as describe in Russ (2012).
- 3.3.2 For pipistrelle species the following criteria, based on measurements of peak frequency, were used to classify calls:
- Common pipistrelle *Pipistrellus pipistrellus* ≥ 42 and < 49 kHz
 - Soprano pipistrelle *Pipistrellus pygmaeus* > 51 kHz
 - Nathusius' pipistrelle *Pipistrellus nathusii* < 39 kHz
 - Common pipistrelle / Soprano pipistrelle ≥ 49 and < 51 kHz
 - Common pipistrelle / Nathusius' pipistrelle ≥ 39 and < 42 kHz
- 3.3.3 In addition, calls by bat species of the *Myotis* genus were not identified to species level. Bats in this genus cannot reliably be separated on calls alone due to the overlap in call characteristics between the species.

3.4 Limitations to method

3.4.1 Building inspection

- 3.4.1.1 Access to B8 was restricted due to the presence of fencing. The building inspection was carried out from behind the metal fencing and consequently the interior could not be inspected for feeding remains or signs of bat droppings. This did not present a constraint on the ability to assess the suitability to support roosting bats, as the building is a single skin, corrugated metal building. It is open-sided and exposed on the west aspect and therefore likely to be subject to daylight ingress and driving weather. The building has been categorised as having low suitability for roosting bats.

3.4.2 Emergence surveys

- 3.4.2.1 The two surveys carried out on B7, which was classified as having moderate suitability for roosting bats, were both carried out at dusk. Current data on bat emergence and re-entry times suggests that a high proportion of bats returning to roosts do so before dawn re-entry surveys typically commence (Andrews & Pearson; 2017). Dawn surveys are, therefore, at risk of missing the return of bats to roosts. The use of thermal imaging and infra-red cameras also reduces the risk of missing bats emerging from a building / structure after sunset during a dusk emergence survey. It is therefore considered that the absence of dawn surveys has not resulted in a constraint to the survey.

3.5 Personnel

- 3.5.1 The team for this project included the following members of staff.

- Gareth Lang BSc MSc ACIEEM, NRW bat survey licence number S088802. Gareth led the dusk emergence surveys and completed endoscope inspections of the Bridge and Wall. Gareth has more than 10 years' experience in bat survey work and has completed building inspections and emergence survey of a wide variety of structures supporting several species of bat.
- Rachel Potter BSc MSc ACIEEM. Rachel assisted with the emergence survey work. Rachel has more than 10 years' experience in bat survey work and has authored bat licence applications for a variety of heritage sites.
- Janine Burnham BSc (Hons) MRes ACIEEM authored this report. Janine has been a professional consultant for 7 years, and has extensive experience with protected species licences, in the

production of ES Chapters and in the technical review of various written outputs.

- James Garside BSc. James carried out the building inspections and was a surveyor on the dusk emergence surveys. James has more than 5 years' experience of bat survey work.
- Joanne Conway BSc. PG Cert; Joanne assisted with the building inspections and dusk emergence surveys. Joanne has more than 5 years' experience of bat survey work.
- Becky Gibbs BSc. Becky assisted with the building inspections and dusk emergence surveys. Becky is a registered bat carer and has undertaken emergence surveys and building inspections for bats over the last three years.
- Siwan Clifford BSc MSc. Siwan was a surveyor on the dusk emergence surveys and has gained experience of bat survey on a variety of projects over a period of two years.
- Alice Connell BSc. Alice was a surveyor on the dusk emergence surveys. Alice is a graduate with a background in ecology and has gained experience of bat survey through the 2022 survey season.

3.5.2 A summary of each BSG staff member's experience and competence as a professional ecologist is provided at <http://www.bsg-ecology.com/people/>

4 Results and Evaluation

4.1 Building inspection

- 4.1.1 Two of the structures inspected by Arup in 2019 (B28 and B31) are no longer in existence, having been demolished prior to the 2022 update surveys.
- 4.1.2 One building, B7, was assessed as having **moderate** suitability. Details of PRFs are provided in Table 4. A photograph of the building is provided in **Appendix 3**.

Table 4: Summary of results for external inspections for B7 - Moderate suitability to support roosting bats.

Building/structure ID	Features
B7	The PRFs recorded on B7 include damaged wooden barge boards on the south and east aspects of the building. Further PRFs in the form of missing mortar and bricks, two large gaps in brickwork leading into the cavity wall and a gap in a wooden soffit are present on the north aspect.

- 4.1.3 Two buildings were assessed as having low suitability for roosting bats (B6A and B8). A summary of the inspection results is provided in **Table 5** and photographs are provided in **Appendix 3**.

Table 5: Summary of results for external inspections for the B6A, and B8 - Low suitability to support roosting bats.

Building/structure ID	Features
B6A	UVPC fascias on the north west and south aspect are lifting, creating gaps between the fascia however, cobwebs are largely present. A 5 cm x 5 cm hole is present at 0.1 m from ground-level and extends into the interior through the cavity wall.
B8	A corrugated shed with an open side on the west aspect, the building is too open and draughty to support a maternity roost. However, the open side and wooden beam inside may provide a suitable feeding or night- roost perch for bats.

- 4.1.4 The remaining five buildings (Additional Buildings 1,6,7,8 and 29) surveyed were classified as having negligible suitability to support roosting bats due to absence of PRFs or internal conditions that are unsuitable for bat roosts, such as being too open to provide stable in temperature and subject to light spill into the interior.
- 4.1.5 The Bridge and other brick structures within the Phase 2A site have **high** and **moderate** suitability respectively, to support roosting bats and the potential to support hibernating bats. Full details are provided within the Phase 2A Bat Survey Report.

- 4.1.6 Full building descriptions are provided in Appendix 2, and photographs in Appendix 3.

4.2 Dusk emergence surveys

- 4.2.1 No bats were recorded emerging from any of the buildings surveyed as part of the Phase 1A surveys. However, concurrent surveys of buildings within Phase 2A of the development (reported separately, DM 2022) identified two roosts of common pipistrelle bat (B35 and B38 supporting between 1 and 2 pipistrelles).
- 4.2.2 At least four species of bat were recorded throughout the surveys. These were: common and soprano pipistrelle, noctule and bats in the genus *Myotis*.
- 4.2.3 Common and soprano pipistrelles were the most frequently recorded species across the Site, with passes recorded at all locations on all surveys.
- 4.2.4 Noctule was recorded during the surveys of B7 on 8 August 2022. These were most likely commuting over the Site as passes were recorded early in the survey (before or within 20 minutes of sunset) and late in the survey (86 minutes after sunset).
- 4.2.5 *Myotis* species were recorded during surveys of B6, B7 and B8 with all records between 40 and 100 minutes after sunset.
- 4.2.6 Bats and their roosts are fully protected under the Wildlife and Countryside Act 1981 (as amended), and through the Conservation of Habitats and Species Regulations 2017 (as amended). See Appendix 4.
- 4.2.7 Potential impacts on bats as result of the proposed development are detailed in section 5 with recommendations for mitigation and enhancement measures to ensure that the proposed works are compliant with current wildlife legislation.

5 Potential Impacts and Recommendations

- 5.1.1 Building B7 has been assessed as having Moderate suitability for roosting bats, Buildings B6a and B8 have been assessed as having Low suitability and Additional Buildings 1,6,7,8 and 29 have been assessed as having Negligible suitability.
- 5.1.2 Additionally, roosting bats have been identified within two of the buildings, within the Phase 2A site. A number of other buildings and structures (including the Bridge) within the 2A site have also been identified as being suitable to support hibernating bats, as well as having suitability for summer roosts (DM 2022). The Phase 2A report should be read alongside this report.
- 5.1.3 There is potential for Phase 1A works in the west of the site (as well as any works proposed during Phase 2A), near to the Bridge, to disturb any hibernating bats that may be present in the structure and no work should commence in this area until hibernation checks of the Bridge are completed, along with hibernation checks of other brick structures (as recommended in the Phase 2A survey report, DM 2022).
- 5.1.4 It is likely that bats will move roost locations regularly and exploit other roost opportunities within the Site. Therefore, the building within Phase 1A of the Site assessed as having moderate suitability to support roosting bats (B7) is likely to contribute to the roosting resource within the Site. As a precautionary measure, the demolition of B7 should be carried out under the licenced method statement that will be required for the buildings containing confirmed roosts in Phase 2A of the Site (DM, 2022).
- 5.1.5 It is unlikely that the destruction of the PRFs in buildings assessed as having low suitability for bat roosts (B6A and B8) will have a significant negative impact on the favourable conservation status of the local bat population. However, these structures should be inspected by a suitably experienced ecologist immediately prior to demolition to confirm likely absence of roosting bats.
- 5.1.6 Impacts on roosting bats are unlikely to occur during demolition of buildings assessed as having negligible suitability to support roosting bats, and these buildings (with reference to Appendix 2) can be demolished without the need for further checks.
- 5.1.7 Appropriate compensation for the loss of suitable roosting resources as a result of the proposed works will be agreed with Natural Resources Wales during the licence application process.

- 5.1.8 Construction work and lighting has potential to disturb bats foraging within the Site through increased activity and light spill. Light spill onto dark corridors within the Site could also interrupt bat flight lines and impact on bats commuting across the Site. The Ecological Protection Plan for the Phase 1A Site should set out appropriate controls for reducing impacts on foraging and commuting bats during the construction phase.

6 References

- Andrews, H. & Pearson, L. (2017). A review of empirical data in respect of emergence and return times reported for the UK's 17 native bat species. Andrews Ecology, Somerset. Available at <http://battreehabitatkey.co.uk/wp-content/uploads/2017/06/AEcol-REVIEW-OF-EMERGENCE- AND-RETURN-EMPIRICAL-DATA-2017-Ver.-4.pdf> > Accessed: 12/10/2022
- Arup (2020). Global Centre for Rail Excellence (GCRE) Bat Roost Survey Report
- Arup (2020). GCRE Environmental Statement. Welsh Government
- DM (2022) Global Centre for Rail Excellence (GCRE) Phase 2A Bat Survey Report
- DM (2022) GCRE Ecological Protection Plan Phase 1A
- Institution of Lighting Professionals (ILP) and Bat Conservation Trust (BCT), (2018). Bats and artificial lighting in the UK - Bats and the Built Environment Series. Online source: < Guidance Note 8 Bats and artificial lighting | Institution of Lighting Professionals (theilp.org.uk) Accessed: 12/10/2022
- Collins, J. (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines, 3rd Edition. The Bat Conservation Trust, London.
- Russ J. (2012). British Bat Calls: A Guide to Species Identification. Pelagic Publishing, Exeter.
- Stone, E. L., Jones, G., and Harris, S. 2009. Street Lighting Disturbs Commuting Bats. Current Biology 19: 1123-11

Appendices

Appendix 1: Figures



- Legend
- Phase 1A Site
 - Phase 1A Building Locations

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JOB REF: P22-218

PROJECT TITLE
GLOBAL CENTRE FOR RAIL EXCELLENCE (GCRE)

DRAWING TITLE
Figure 1: Building Locations - Phase 1A

DATE: 14/10/2022 CHECKED: JB SCALE: 1:3,000
DRAWN: KR APPROVED: GL VERSION:1.0

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No dimensions are to be scaled from this drawing and are to be checked on site.
Area measurements for indicative purposes only.

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Projection: OSGB 1936/British National Grid - EPSG 27700

Sources: BSG Ecology survey data

Appendix 2: Results of building inspections

Location		Building height	No. of storeys	Walls			Roof			Comments		
Building ID	Grid reference			Material **	Open sided Y/N	Solid (S)/cavity (C)	Hanging tiles	Angle	Material	Furniture	Features	Level of suitability
Additional 1	SN 8459010660	c. 15 m	1	Corrugated metal	Y	S	N	Flat	Corrugated material	Skylights	Completely open underneath the coal processing unit allowing access inside. However, due to the lack of floor, the unit is likely to be draughty. Multiple holes in metal corrugated walls. Metal corrugated roof lifting and dented in places	Negligible
Additional 6	SN 8440410661	c. 2 m	1	Corrugated metal	N	S	N	Flat	Other	Skylights	Currently in operation. No PRFs. Watertight cabin.	Negligible
Additional 7 (No longer present) Storage container present.	SN 8440910660	c. 2 m	1	Corrugated metal	N	C	N	Flat	Corrugated material		Metal storage container. Rusted holes in places but no cavity.	Negligible

Additional 8 (Only foundations)	SN 84448 10663										Several bricks and mortar missing but no cavities. A 1-2cm gap is present between concrete blocks Foundations holding water	Negligible
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Location		Building height	No. of storeys	Walls			Roof			Comments		
Building ID	Grid reference			Material **	Open sided Y/N	Solid (S)/cavity (C)	Hanging tiles	Angle	Material	Furniture	Features	Level of suitability
6A (Rail weighbridge)	SN 8432810539	c. 3.5 m	1	Brick	N	C	N	Flat	Felt		UVPC fascias on the north west and south aspect lifting in places, however, cobwebs are largely present. A 5 cm x 5 cm hole present, 0.1 m from ground-level extending into the interior through the cavity wall.	Low
7 (Bays pump house)	SN 8429210583	c. 3 m	1	Brick	Y	C	N	Flat	Felt	Barge boarding	Damaged wooden barge boards on south and east aspect. Missing mortar and bricks, with two large gaps in brickwork leading into the cavity wall (3 cm x 3 cm and 20 cm x 20 cm, both 2.5 m from ground-level) on the northern aspect. Gap in wooden soffit on north aspect.	Moderate

8	SN 84298 10597	c. 2 m	1	Corrugated metal	Y	S	N	Slanted	Corrugated material		A corrugated shed open- sided on the west aspect. Too open and draughty to support a maternity roost. Open side and wooden beam may provide a suitable feeding perch for horseshoe bats or brown long-eared bats. This building was inspected from behind a metal fence so the interior could not be inspected for feeding remains or signs of droppings.	Low
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Location		Building height	No. of storeys	Walls			Roof			Comments		
Building ID	Grid reference			Material **	Open sided Y/N	Solid (S)/cavity (C)	Hanging tiles	Angle	Material	Furniture	Features	Level of suitability
28 (Additional 2) (No longer present - demolished)	SN 84798 10667											N/A
29 (Additional 3)	SN 84806 10605	c. 30 m	1	Corrugated metal	Y	S	N	Pitched	Corrugated material	Skylights	Coal processing shed. Access to the interior through missing doors.	Negligible
31 (Additional 4) (No longer present - demolished)	SN 84859 10592											N/A

Appendix 3: Photographs

Building / structure ID and suitability to support roosting bats Refer to Figure 1 for location and Appendix 1 for description)	Photograph
Additional 1 Negligible	
Additional 6 Negligible	
Additional 7 Negligible	

Building / structure ID and suitability to support roosting bats Refer to Figure 1 for location and Appendix 1 for description)	Photograph
Additional 8 Negligible	
B6A Low	

Building / structure ID and suitability to support roosting bats Refer to Figure 1 for location and Appendix 1 for description)	Photograph
B7 Moderate	
B8 Low	
B29 Negligible	

Building / structure ID and suitability to support roosting bats Refer to Figure 1 for location and Appendix 1 for description)	Photograph
B31 (Additional 3) No longer present None	

Appendix 4: Summaries of Relevant Policy, Legislation and Other Instruments

6.1.1 This section briefly summarises the legislation, policy and related issues that are relevant to the main text of the report. The following text does not constitute legal or planning advice.

6.1.2 European protected species (Animals)

6.1.2.1 The Conservation of Habitats and Species Regulations 2017 (as amended) consolidates various amendments that have been made to the original (1994) Regulations which transposed the EC Habitats Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora (Council Directive 92/43/EEC) into national law.

6.1.2.2 “European protected species” (EPS) of animal are those which are shown on Schedule 2 of the Conservation of Habitats and Species Regulations 2017 (as amended). They are subject to the provisions of Regulation 43 of those Regulations. All EPS are also protected under the Wildlife and Countryside Act 1981 (as amended). Taken together, these pieces of legislation make it an offence to:

- a) Intentionally or deliberately capture, injure or kill any wild animal included amongst these species
- b) Possess or control any live or dead specimens or any part of, or anything derived from a these species
- c) Deliberately disturb wild animals of any such species
- d) Deliberately take or destroy the eggs of such an animal, or
- e) Intentionally, deliberately or recklessly damage or destroy a breeding site or resting place of such an animal, or obstruct access to such a place

For the purposes of paragraph (c), disturbance of animals includes in particular any disturbance which is likely—

- a) To impair their ability—
 - i. to survive, to breed or reproduce, or to rear or nurture their young, or

- ii. in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- b) to affect significantly the local distribution or abundance of the species to which they belong.

Although the law provides strict protection to these species, it also allows this protection to be set aside (derogated) through the issuing of licences. The licences in England are currently determined by Natural England (NE) for development works and by Natural Resources Wales in Wales. In accordance with the requirements of the Regulations (2017, as amended), a licence can only be issued where the following requirements are satisfied:

- a) The proposal is necessary ‘to preserve public health or public safety or 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’
- c) The proposals ‘will not be detrimental to the maintenance of the population of the species concerned at a favourable conservation status in their natural range.

6.1.2.3 Definition of breeding sites and resting places

6.1.2.4 Guidance for all European Protected Species of animal, including bats and great crested newt, regarding the definition of breeding and of breeding and resting places is provided by The European Council (EC) which has prepared specific guidance in respect of the interpretation of various Articles of the EC Habitats Directive. Section II.3.4.b) provides definitions and examples of both breeding and resting places at paragraphs 57 and 59 respectively. This guidance states that ‘The provision in Article 12(1)(d) [of the EC Habitats Directive] should therefore be understood as aiming to safeguard the ecological functionality of breeding sites and resting places.’ Further the guidance states: ‘It thus follows from Article 12(1)(d) that such breeding sites and resting places also need to be protected when they are not being used, but where there is a reasonably high probability that the species concerned will return to these sites and places. If for example a certain cave is used every year by a number of bats for hibernation (because the species has the habit of returning to the same winter roost every year), the functionality of this cave as a hibernating site should be protected in summer as well so that the bats can re-use it in

winter. On the other hand, if a certain cave is used only occasionally for breeding or resting purposes, it is very likely that the site does not qualify as a breeding site or resting place.'

6.1.3 Birds

- 6.1.3.1 All nesting birds are protected under Section 1 of the Wildlife and Countryside Act 1981 (as amended) which makes it an offence to intentionally kill, injure or take any wild bird or take, damage or destroy its nest whilst in use or being built, or take or destroy its eggs. In addition to this, for some rarer species (listed on Schedule 1 of the Act), it is an offence to disturb them whilst they are nest building or at or near a nest with eggs or young, or to disturb the dependent young of such a bird.
- 6.1.3.2 The Conservation of Habitats and Species Regulations 2017 (as amended) places duties on competent authorities (including Local Authorities and National Park Authorities) in relation to wild bird habitat. These provisions relate back to Articles 1, 2 and 3 of the EC Directive on the conservation of wild birds (2009/147/EC, 'Birds Directive'¹) (Regulation 10 (3)) requires that the objective is the 'preservation, maintenance and re-establishment of a sufficient diversity and area of habitat for wild birds in the United Kingdom, including by means of the upkeep, management and creation of such habitat, as appropriate, having regard to the requirements of Article 2 of the new Wild Birds Directive...' Regulation 10 (7) states: 'In considering which measures may be appropriate for the purpose of security or contributing to the objective in [Regulation 10 (3)] Paragraph 3, appropriate account must be taken of economic and recreational requirements'.
- 6.1.3.3 In relation to the duties placed on competent authorities under the 2017 Regulations, Regulation 10
- 6.1.3.4 (8) states: 'So far as lies within their powers, a competent authority in exercising any function [including in relation to town and country planning] in or in relation to the United Kingdom must use all reasonable endeavours to avoid any pollution or deterioration of habitats of wild birds (except habitats beyond the outer limits of the area to which the new Wild Birds Directive applies).'



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