



Foel Trawsnant Grid Connection Further Ecological Information

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INTRODUCTION

The Further Ecological Information (hereafter referred to as the “FEI”) has been produced in support of the Foel Trawsnant Grid Connection Development of National Significance (DNS) Application (ref.: DNS CAS-02505-N3T6M4). This DNS Application was submitted to Planning and Environment Decisions Wales (PEDW) for formal review in August 2025 following the production of an Environmental Statement (ES).

The FEI provides additional survey data to ensure the DNS Application has a full suite of ornithological, bat and otter survey data. The additional survey data collected does not change the assessments or conclusions made in the ES.

The FEI contains the following reports:

- Baseline Ornithology Report: Breeding Season 2025;
- Otter Survey Report; and
- Bat Survey Report.

Baseline Ornithology Survey Report: Breeding Season 2025



PENNANT WALTERS

FOEL TRAWSNANT GRID CONNECTION

Baseline Ornithology Report: Breeding Season
2025





PENNANT WALTERS

FOEL TRAWSNANT GRID CONNECTION

Baseline Ornithology Report: Breeding Season 2025

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EXECUTIVE SUMMARY

This report documents the methods and results of a range of ornithological surveys undertaken between February and July 2025 inclusive at the Site of the proposed Foel Trawsnant Grid Connection project located within Bridgend County Borough Council (CBC) and Neath Port Talbot CBC in South Wales (hereafter referred to as 'the Site'). This full suite of ornithological survey data is to supplement the information submitted within the DNS application (CAS-02505-N3T6M4) on the 15th August 2025. It does not alter the conclusions or mitigations recommended within the Environmental Statement (ES).

Survey work during the 2025 wintering and breeding season completed comprised of vantage point (VP) surveys from two locations, with 6 (wintering season) and 36 (breeding season) hours of observation completed from each VP; four moorland bird surveys (MBS) visits to the Site plus 500 metre (m) buffer (where access was available); two nightjar surveys of suitable habitat in the Site plus 500m buffer (where access was available); and four breeding raptor walkover survey visits to the Site plus 2km buffer (where access was available).

During the winter VP surveys, only one target species was recorded with a single flight recorded of goshawk. Four target species were recorded during the breeding season VP surveys: goshawk, red kite, kestrel and merlin. One target species could be considered to be regularly recorded during the VP surveys: red kite (37 flights, totalling 37 individual flights).

No breeding waders were recorded during the MBS the only wader recorded comprised of a single non-breeding snipe.

During the nightjar surveys, nightjar were recorded near to both the northern and southern Sites during the surveys in mid-June and early July. A peak count of three males were recorded churring and displaying >100m south from the northern Site, with a fourth and fifth male recorded churring >500m south from the northern Site. These observations were all recorded within the Afan Forest Southeast Circular in particular areas of cleared/felled plantation woodland. A peak count of three males were recorded churring with two located >370m west and south west of the southern Site in the Upper Craig Yr Aber Woods, with a third male churring distantly to the west.

No Annex I species listed on the EU Birds Directive / Schedule 1 Wildlife and Countryside Act 1981 (as amended) target species were recorded during the four breeding raptor surveys completed as of June 13th 2025.

There were incidental records of three target species, comprising: goshawk, red kite and kestrel that were recorded during the MBS.

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1 INTRODUCTION

1.1 ABOUT THIS DOCUMENT

- 1.1.1. WSP UK Ltd (“WSP”) was commissioned by Pennant Walters to support a Development of National Significance (DNS) application for the proposed Foel Trawsnant Wind Farm electricity network infrastructure connection. The proposals are located between Bridgend and Neath Port Talbot Counties, near Maesteg, South Wales. To support this application, WSP was commissioned to undertake a suite of ornithological surveys.
- 1.1.2. This report describes the methods and results of the ornithological survey work completed during the 2025 wintering and breeding season which comprised of VP surveys from two locations, with 6 hours (wintering season) and 36 hours (breeding season) of observation completed from each VP; four MBS visits to the Site plus 500m buffer (where access was available); two nightjar surveys of suitable habitat in the Site plus 500m buffer (where access was available); and four breeding raptor walkover survey visits to the Site plus 2km buffer (where access was available).
- 1.1.3. The proposals, comprise 66 kilovolt (kV) overhead lines (OHL) and underground cables (UGC), which will provide a connection between the Foel Trawsnant Wind Farm and the wider national grid. The existing OHL (approximately 2km south-west of the settlement of Llangynwyd (British National Grid: SS841874)) will serve as the connection point for the proposals. The connection will consist of approximately 5.1km of UGC and approximately 3.9km of OHL. Whilst the requirement for a DNS application is triggered by the OHL section, the whole of the connection will require DNS consent. This report focuses on the OHL sections. This is because of the collision and/or electrocution risk to birds associated with the installation of OHL and supporting masts (NatureScot, 2025).

1.2 SITE DESCRIPTION

- 1.2.1. The Proposed Development will be located less than 1km to the west of Maesteg, in South Wales. The Proposed Development is hereafter referred to as the ‘Site’ and is illustrated in **Figure 8I.1** and is split into northern and southern sections.
- 1.2.2. In September and October 2024, a Preliminary Ecological Appraisal (PEA) was carried out by WSP of the Site. An additional buffer area of 50m around the Site was also surveyed and is hereafter referred to as the ‘PEA Survey Area’. This supplemented a CSA Environmental PEA report which was produced in October 2024 (CSA Environmental, 2024).
- 1.2.3. The PEA found that the Proposed Development largely comprises agricultural habitat. In the northern section of the Site habitats are open and comprise a mosaic of acid, marshy and improved/semi-improved grazed grasslands. Priority Habitats present in the northern section included ‘lowland dry acid grassland’, ‘lowland fen’, ‘purple moor-grass and rush pasture’, ‘upland oakwoods’ and ‘rivers’. In the southern section of the Site, habitats were dissected with field boundaries including hedgerows and tree lines and there was more evidence of grazing, particularly by sheep. Priority Habitats in this section included ‘wet woodland’, ‘lowland mixed deciduous woodland’, ‘purple moor-grass and rush pasture’, ‘hedgerows’, ‘rivers’, as well as a parcel of ancient semi-natural woodland (ASNW).
- 1.2.4. The habitats within the PEA Survey Area were considered suitable for common and widespread breeding birds. It was also considered that some species listed on Schedule 1 of the Wildlife and

Countryside Act 1981 (WCA), such as red kite and honey buzzard, may nest in the habitats in the southern section of the Site.

- 1.2.5. Seven bird species were seen or heard within the PEA Survey Area. These species were dipper, red kite (listed on Schedule 1 of the WCA), swift (listed on the Birds of Conservation Concern 4 Wales (BoCC4W) – Red List (BoCC, 2022)), house martin (BoCC4W – Amber List), skylark (Priority Species, BoCC4W – Amber List), northern wheatear (BoCC4W – Amber List) and meadow pipit (BoCC4W – Red List).

1.3 BACKGROUND AND SCOPE

- 1.3.1. The key issues relating to birds and OHL are as follows:

- The effects of direct habitat loss due to land take by OHL mast bases and other associated structures, including access and compound areas during construction periods;
- The effects of disturbance and displacement of birds from the proximity of the OHL. Such disturbance may occur as a consequence of construction work, or due to the presence of the OHL close to nest Sites or feeding areas or on habitual flight routes; and
- The effects of collision/electrocution with OHL (i.e. killing or injury of birds), which is of particular relevance for Sites located in areas with high raptor activity or which support large concentrations of waterfowl.

- 1.3.2. With regards to the first issue, measures have been built into the Proposed Development design/construction plan early in the design process to minimise the loss of habitat required. All opportunities for habitat retention have been taken into consideration. This will be achieved through ‘micro-siting’ or precise placement of OHL masts. Furthermore, where required, clearance of habitat will be temporary wherever possible with turf translocation utilised to maintain the species diversity of the temporarily removed habitats. Permanent removal vegetation is proposed for one section of trees to facilitate the UGC works. Therefore, the permanent loss of nesting and foraging habitat for birds will be small and will generally have little effect on bird populations. In the case of the Proposed Development, it is the latter two issues, collision/electrocution risk and displacement, which may potentially be more significant.

- 1.3.3. NatureScot (2025) provides guidance relating to the assessment and mitigation of impacts of power lines on birds.

- 1.3.4. NatureScot (2025) guidance recommends that one year of relevant bird survey work is typically appropriate for proposed OHL developments, however, further detailed assessments may be required after these, depending on results. Species most susceptible to OHL impacts include waterfowl, waders, raptors and game birds. For this reason, field surveys should be focused on ‘target species’, which will generally be limited to those which are afforded a higher level of legislative protection. Additional species may also be considered where their behaviour makes them more likely to be impacted by the Proposed Development. Target species, detailed within **Section 1.5**, were identified prior to surveys commencing (in winter 2025) from a desk-based review of available literature, as well as local knowledge of species distribution. This list was also updated where additional species were identified during the survey period(s).

- 1.3.5. For the purposes of this report, nomenclature follows that of the British Ornithologists’ Union (BOU, 2022). Scientific names for all species mentioned in the text and tables are included in **Appendix C**.

1.4 DESK STUDY

- 1.4.1. As part of the PEA carried out by WSP, a desk study was carried out which identified 906 records of 53 protected and/or notable bird species within 2km of the Site within the last 10 years. A total of 22 of these species were listed on Schedule 1 of the WCA. Of these, 21 bird species were listed on Part 1 (protected at all times) of Schedule 1, for example, barn owl, marsh harrier, and merlin. One bird species was listed on Part 2 (protected during the close season) of Schedule 1. This comprised a single pintail record.
- 1.4.2. The honey buzzard, also listed on Schedule 1 – Part 1, was not listed in the desk study but identified in the PEA as being known to be present within the wider area. Similarly, nightjar, listed on Annex I of the EU Birds Directive (Annex 1), was also identified in the PEA as being present in the wider area around the Site, foraging in open areas adjacent to woodlands.
- 1.4.3. A total of 31 bird species (of the 53 species returned from the desk study) were listed as Priority Species in accordance with Section 7 of the Environment (Wales) Act 2016. These included curlew, lapwing, and yellowhammer.

1.5 TARGET SPECIES

- 1.5.1. The following key species of conservation concern (i.e. 'target species') were identified:
- All geese, swans and ducks (except mute swan, Canada goose and mallard);
 - All Schedule 1 of the WCA and Annex I raptors and owls (including honey buzzard, osprey, red kite, goshawk, hen harrier, peregrine, merlin, barn owl and short-eared owl);
 - All Schedule 1 and Annex I wader species (including golden plover, dotterel and dunlin); and
 - All Environment (Wales) Act 2016 Section 7 raptors.
- 1.5.2. Additionally, the following secondary species were identified: common wildfowl e.g., mallard and mute swan; common raptors/owls such as buzzard, sparrowhawk and tawny owl; non-Annex I/Schedule 1 of the WCA waders e.g., curlew, lapwing, snipe, common sandpiper and redshank; all gull species; and raven; as well as Environment (Wales) Act 2016, Section 7 passerines, gulls, waders and waterfowl.

2 SURVEY METHODS

2.1 SURVEYORS

- 2.1.1. All surveys were undertaken by WSP ornithologists, all of whom have extensive field experience in relevant habitats, a detailed understanding of the key methodologies recommended within NatureScot guidance and experience of monitoring bird activity and distribution at proposed OHL Sites.
- 2.1.2. Methodologies followed have been based on best practice methods for wind farm developments (NatureScot, 2017) this is due to the very closely associated risks that both wind farms and OHL pose to birds. The ornithological survey areas are illustrated in **Figure 8l.2**.

2.2 WINTERING AND BREEDING SEASON VANTAGE POINT SURVEYS

- 2.2.1. VP (vantage point) watches were conducted in accordance with NatureScot (2017) guidance and undertaken throughout the survey period. This method focuses on identifying flightpaths of target species and allows any regularly used flight lines to be identified, allowing OHL masts to be micro-Sited where necessary to reduce collision risk to birds. The data generated can also be used to estimate the theoretical risk of collision with OHL and associated infrastructure by incorporation into a suitable model.
- 2.2.2. The NatureScot guidance is that VPs should be chosen parsimoniously to achieve maximum visibility from the minimum number of locations such that all parts of the survey area are within 2km of a VP. Two VPs were selected (VP locations and view-sheds are shown in **Figure 8l.3**) as being sufficient to survey the Site, the locations of which were:
 - VP1 – SS 83909 93761 or What3words¹ ///glorified.toads.decorator, view bearing 225°; and
 - VP2 – SS 83836 87636 or What3words ///beefed.searches.elect, view bearing 225°.
- 2.2.3. It is considered that these two VPs provided an appropriate coverage of the Site and surrounding suitable habitats and would allow a robust impact assessment to be carried out. Flights were classified using the following three height bands:
 - Band A: 0 – 10m;
 - Band B: 10m – 200m; and
 - Band C: >200m.
- 2.2.4. A total of 12 hours of VP observation has been undertaken between February and March 2025 to cover the wintering season (6 hours per VP) and 72 hours of VP observation has been undertaken between April and June 2025 to cover the breeding season (36 hours from each VP). The approach to minimise observer disturbance was to allow ten minutes before starting each watch and to remain as inconspicuous as possible (a bivvy bag and camouflaged clothing was used). A 180° arc was scanned alternately by eye and with binoculars until a target species was detected. Flight times of a target species were then recorded with a stopwatch with an audible timer. VP surveys were spread

¹ <https://what3words.com/>

across the full range of daylight. Only flights within the 2km view-shed were recorded, with all other target species flights out-with that zone noted as incidental records.

- 2.2.5. NatureScot (2017) guidance advises that VP surveys should be undertaken in good visibility and can be carried out on showery days providing the showers are not too frequent or prolonged. The cloud base should be high enough to allow observation of the collision risk height. Ideally observations should be undertaken in a range of wind conditions. Watches should be aimed to target heightened activity periods for the target species likely to be present, and the survey programme adhered to this, with surveys planned for periods of suitable weather. The dates, times and weather conditions of the VP watches are provided in **Appendix A, Table A.1**.

2.3 MOORLAND BIRD SURVEY (MBS)

- 2.3.1. The moorland bird assemblage was surveyed using the adapted version of the Brown and Shepherd (1993) method outlined in Gilbert *et al* (1998). The Calladine *et al* (2009) adaptation of the method is referenced in NatureScot (2017) guidance and recommends four visits during the breeding season rather than the Brown and Shepherd (1993) three-visit approach.
- 2.3.2. NatureScot (2017) recommends that the four visits are undertaken at least seven days apart, covering the whole breeding season, each completed between 08:30 and 18:00. Surveys covered the Site plus a 500m buffer where access was available between mid-April and early June.
- 2.3.3. Surveys were undertaken in wind speeds of less than Beaufort force 4, avoiding periods of persistent rain. The method involved a search effort of approximately 20-25 minutes within each 500x500m quadrat of open land. Habitats within the survey area were assessed for their suitability to host breeding moorland waders and areas with unsuitable land use for them were scoped out. Stops were made at regular intervals to scan and listen for birds and the identities and activities of birds were recorded using standard British Trust for Ornithology (BTO) notation. The focus of the surveys was breeding waders, but all other target and secondary species were also mapped.
- 2.3.4. Dates, times and weather conditions during the MBS visits are provided in **Appendix A, Table A.2**.

2.4 BREEDING RAPTOR WALKOVER SURVEY

- 2.4.1. Four Breeding Raptor Walkover surveys have been undertaken between April and July 2025 and followed guidance detailed within Hardey *et al* (2013), focusing on those Schedule 1 of the WCA and/or Annex I species potentially present, particularly ground-nesting raptors such as hen harrier, short-eared owl and merlin, as well as peregrine and forest nesting raptors including honey buzzard and goshawk.
- 2.4.2. Surveys extended to 2km from the Site (1 km for goshawk), and 500m from the OHL route, where access is available, as shown in **Figure 8I.3**.
- 2.4.3. Surveys initially looked for birds displaying in the survey area before refining the search based on any such observations (including from other survey types), any other flights detected (e.g., birds carrying prey or territorial activity) and habitat suitability (e.g., areas of rank vegetation for short-eared owl, hen harrier and merlin; or crags/steep slopes for ground-nesting peregrine). Thereafter, surveys would focus on looking for nest locations and subsequently monitoring breeding success for any nests found.
- 2.4.4. Dates, times and weather conditions during the raptor surveys are provided in **Appendix A, Table A.3**.

2.5 NIGHTJAR SURVEY

- 2.5.1. Two nightjar surveys were conducted, which followed the methods described in Bird Monitoring Methods (Gilbert et al, 1998). This visit was carried out at dusk in June. The surveys commenced at sunset and continued until the completion of the walkover, avoiding cold, wet and windy conditions. The surveys were carried out on suitable areas of habitat within the Site and up to 500m outside the Site boundary and involved recording sightings and nests using standard BTO codes on field maps for each survey. If singing ('churring') or calls were heard, surveyors immediately followed up to locate the bird.
- 2.5.2. Dates, times and weather conditions during the nightjar surveys are provided in **Appendix A, Table A.4**.

2.6 INCIDENTAL RECORDS

- 2.6.1. Target species seen outside of formal survey periods were also recorded (i.e. those observed during walks to and from VP locations, during other breaks in survey work and target species recorded during species-specific surveys). Detailed notes of activity of protected or other target species were made, and all flights mapped.

2.7 LIMITATIONS

- Some bird species are more difficult to detect due to their shy or secretive nature and therefore may have gone undetected by these surveys. As a constraint applicable to all bird surveys, this is not considered to be a significant limitation of this study.

3 SURVEY RESULTS

3.1 WINTERING SEASON VP SURVEYS

- 3.1.1. Only one target species was recorded during the wintering season VP surveys: goshawk. Details of target species flights are provided in **Appendix B**, with **Table B.1** and **Table 3.1** presenting a summary of flight activity, including reference to the duration of flight time between 10-200m height.
- 3.1.2. The flight lines are illustrated in within the **Confidential Appendix (Volume 5)** for goshawk.
- 3.1.3. A total of 12 secondary species were recorded during the VP watches, comprising: crossbill, skylark, song thrush, starling, herring gull, lesser black-backed gull, raven, buzzard and tawny owl.

3.2 BREEDING SEASON VP SURVEYS

- 3.2.1. Four target species were recorded during the breeding season VP surveys: goshawk, red kite, kestrel and merlin. Details of target species flights are provided in **Appendix B**, with **Table B.1** and **Table 3.1** presenting a summary of flight activity, including reference to the duration of flight time between 10-200m height.
- 3.2.2. The flight lines are illustrated in **Figure 8I.4** and within the **Confidential Appendix (Volume 5)** for goshawk and merlin.
- 3.2.3. A total of 13 secondary species were recorded during the VP watches, comprising: cuckoo, grasshopper warbler, reed bunting, skylark, song thrush, herring gull, great black backed gull, lesser black-backed gull, raven, buzzard and sparrowhawk.

Table 3-1 – Summary of VP (wintering and breeding) target species flight activity

Species	Status	Population	Number of observations	Month(s) of observation	Total flight duration at 10-200m height (secs)*
Red kite	Annex I, Schedule 1 WCA, and BoCC5 Green-listed	UK breeding: 4,400 pairs (Woodward <i>et al.</i> , 2020)	37	April, May, and June	2972
Goshawk	Schedule 1 WCA and BoCC5 Green-listed	UK breeding: 954 pairs (740 - 1,252) (Eaton <i>et al.</i> , 2024)	5	February and May	765
Merlin	Annex I, Schedule 1 WCA, BoCC5 Red-listed	UK breeding: 1,160 pairs (248 – 358) (Eaton <i>et al.</i> , 2024)	1	May	150
Kestrel	Welsh EA Schedule 7, and BoCC5 Amber listed	UK breeding: 31,000 pairs (Woodward <i>et al.</i> , 2020)	3	May	178

* Summed for each individual.

3.3 MOORLAND BIRD SURVEY

- 3.3.1. A single snipe was recorded within the southern Site and its 500m buffer; no territorial behaviour was observed.
- 3.3.2. Full details of the MBS results are provided in **Appendix B, Table B.2** and are summarised within **Table 3.2** below. The results are illustrated within **Figure 8I.5**.

Table 3-2 – Summary of MBS results

Species	Status	Population	No. of territories within Site	Total no. of territories within Site and 500m buffer	Notes
Snipe	BoCC5 Amber-listed	UK breeding: 64,500 pairs (Woodward <i>et al.</i> , 2020)	0	0	One flushed from wet ditch by surveyor

- 3.3.3. A total of 17 secondary species were recorded during the MBS surveys comprising: bullfinch, cuckoo, dunnock, grasshopper warbler, house sparrow, reed bunting, skylark, starling, song thrush, tree pipit, linnet, herring gull, great black-backed gull, lesser black-backed gull, raven, buzzard and sparrowhawk.

3.4 NIGHTJAR SURVEY

- 3.4.1. Nightjar were recorded near to both the northern and southern Sites during the surveys in mid-June and early July. A peak count of three males were recorded churring and displaying >100m south from the northern Site, with a fourth and fifth male recorded churring >500m south from the northern Site. These observations were all recorded within the Afan Forest Southeast Circular in particular areas of cleared/felled plantation woodland. A peak count of three males were recorded churring with two located >370m west and southwest of the southern Site in the Upper Craig Yr Aber Woods, with a third male churring distantly to the west. The full results are illustrated withing **Figure 8I.6**.

3.5 BREEDING RAPTOR WALKOVER SURVEY

- 3.5.1. No Annex I / Schedule 1 species were recorded during the breeding raptor surveys. Future details of all confidential information pertaining to breeding Schedule 1 raptors and owls will be provided within the **Confidential Appendix**.
- 3.5.2. Secondary raptor/owl species recorded comprised buzzard and sparrowhawk only. Raven was also recorded during the raptor surveys. While no raven nest sites were found, one secondary raptor/owl nest was recorded. A single sparrowhawk nest site located >800m west of the Site in the Upper Craig Yr Aber Woods. This nest record is presented in **Appendix B, Table B.4** and illustrated in **Figure 8I.7**.
- 3.5.3. Furthermore, it is considered that buzzard were breeding within the raptor survey area as birds were seen carrying food to probable nest sites in the Upper Craig Yr Aber Woods. Additionally, a juvenile buzzard was recorded during the MBS survey of the southern section in July in a stretch of woodland c. 400m east of the Site, northeast of Castell Farm.

3.6 INCIDENTAL RECORDS

- 3.6.1. There were incidental records of three target species, comprising goshawk, red kite and kestrel. All incidental records are presented in **Appendix B, Table B.3** and illustrated in **Figure 8I.8**. Confidential incidental records will be presented within the **Confidential Appendix**.

4 TARGET SPECIES SUMMARY

- 4.1.1. A summary of target species activity² from the surveys and a review of their status is presented, though all results considered to be confidential will be detailed within the **Confidential Appendix**.

4.2 VANTAGE POINT SURVEYS

- 4.2.1. Only one target species has had more than 10 flights recorded.

RED KITE

- 4.2.2. There were 37 flights of red kite recorded (totalling 37 individual flights). Flight activity was widely distributed around the areas of plantation woodland south of both the northern Site (Afan Forest Southeast Circular) and southern Site (Upper Craig Yr Aber Woods), mainly to the south and southeast of the proposed northern and southern OHL routes but crossing both Sites on occasion. Flight activity was concentrated in the months of May, which coincides with the core breeding period where adults are focused on feeding their young. These flights are illustrated in **Figure 8I.4**.
- 4.2.3. There was one incidental record of a red kite foraging in a sheep grazed field during the MBS in mid-May and a further three incidental records of red kite in flight in early-July.

4.3 BREEDING WADER ASSEMBLAGE

- 4.3.1. No breeding waders were recorded during the MBS surveys. The only wader recorded was a single non-breeding snipe.
- 4.3.2. A single snipe was recorded in a wet ditch <10m from the redline boundary, bordering a sheep grazed field on the southern section of the Site. With no repeat records of this individual snipe and no breeding or territorial behaviour observed, it is considered that this snipe is not holding territory.

4.4 NIGHTJAR

- 4.4.1. Nightjars were recorded >100m south from the northern Site within the Afan Forest Southeast Circular and >370m west and south west from the southern Site in the Upper Craig Yr Aber Woods. No nightjars have to date been recorded within or immediately adjacent to either the northern or southern Sites.

4.5 BREEDING RAPTORS

- 4.5.1. No Annex I / Schedule 1 of the WCA species were recorded during the breeding raptor surveys.

² Records of any target species where activity was considered to be minor (e.g., restricted to incidental records or less than ten flights recorded during VP surveys) are not considered within this Section.

5 CONCLUSION

- 5.1.1. Given the results of the ornithological surveys and following the mitigation outlined in **Chapter 8: Ecology**. It is expected that there will be no significant effects on the either target or secondary bird species as a result of the proposed Foel Trawsnant Grid Connection project.

6 REFERENCES

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APPENDIX A – SURVEY CONDITIONS

Table A-1 – Dates, times and weather conditions during VP surveys

Date	Start	Finish	Duration (hr:min)	Weather conditions
VP1				
24/02/25	15:00	18:00	3	Dry, Wind SSW F4, Cloud Cover 8/8, Visibility 1-3 km (patchy across viewshed), Temp 7c
11/03/25	15:20	18:20	3	Dry, Wind NNE F3 reducing to F2, Cloud Cover 5/8, Visibility >3km (Excellent), Temp 7C
16/04/25	12:30	15:30	3	Dry, Wind WSW F4, Cloud Cover 7/8, Visibility >3km, Temp 7C
16/04/25	16:00	19:00	3	Dry, Wind WSW F4, Cloud Cover 6/8, Visibility >3km, Temp 8C
13/05/25	08:30	11:30	3	Occasional brief showers, Wind E F3, Cloud Cover 7/8 at start reducing to 1/8 by final hour, Visibility >3km, Temp 12C increasing to 16C
13/05/25	12:00	15:00	3	Dry, Wind ESE F3, Cloud Cover 1/8 at start increasing to 6/8 at end, Visibility >3km, Temp 18C
11/06/25	11:40	14:40	3	Dry, Wind SE F3, Cloud Cover 1/8 at start increasing to 4/8 at end, Visibility >3km, Temp 18C
11/06/25	15:10	18:10	3	Dry, Wind SE F3, Cloud Cover 4/8, Visibility >3km, Temp 20C
08/07/25	09:37	12:37	3	Dry, Wind NW F2-3, Cloud Cover 2/8, Visibility >3km, Temp 14C to 18C
08/07/25	13:15	16:15	3	Dry, Wind NW F3, Cloud Cover 1/8, Visibility >3km, Temp 18C to 20C
29/07/25	10:30	13:30	3	Frequent brief showers, Wind WNW F3, Cloud Cover 8/8, Visibility 1-3 km for 1st hr and >3 km thereafter, Temp 18C
29/07/25	14:00	17:00	3	Occasional light showers, Wind NW F3, Cloud Cover 8/8, Visibility >3 km (close to 100km), Temp 18C



Date	Start	Finish	Duration (hr:min)	Weather conditions
VP2				
25/02/25	15:00	18:00	3	Dry, Wind W F3, Cloud Cover 2/8, Visibility >3 km (excellent), Temp 8C
12/03/25	15:20	18:20	3	Dry, Wind F4 N, Cloud Cover 6/8 reducing to 3/8 in 2nd hr and 1/8 in 3rd hr, Visibility >3 km (excellent), Temp 7C
15/04/25	06:30	09:30	3	Dry, Wind NNE F2, Cloud Cover 8/8, Visibility >3km, Temp 7C
15/04/25	10:00	12:00	2	Dry until heavy rain in final hour, Wind E F2, Cloud Cover 8/8, Visibility >3km, Temp 8C
17/04/25	10:50	11:50	1	Dry, Wind ESE F2, Cloud Cover 7/8, Visibility >3km, Temp 8C
14/05/25	08:45	11:45	3	Dry, Wind ENE F3, Cloud Cover 0/8, Visibility >3km, Temp 13C to 18C
14/05/25	12:15	15:15	3	Dry, Wind E F3, Cloud Cover 0/8, Visibility >3km, Temp 18C
10/06/25	09:50	12:50	3	Dry, Wind WNW F3, Cloud Cover 8/8, Visibility >3km, Temp 13C to 15C
10/06/25	13:20	16:20	3	Dry, Wind WNW F2, Cloud Cover 8/8, Visibility >3km, Temp 15C
09/07/25	10:15	13:15	3	Dry, Wind W F2-3, Cloud Cover 6/8, Visibility >3km, Temp 16C to 19C
09/07/25	13:30	16:30	3	Dry, Wind W F2, Cloud Cover 4/8, Visibility >3km, Temp 19C to 24C
28/07/25	18:00	21:00	3	Dry, Wind W F3, Cloud Cover 4/8, Visibility >3km, Temp 19C to 16C
30/07/25	09:00	12:00	3	Dry, Wind WNW F2, Cloud Cover 7/8, Visibility >3km, Temp 18C to 20 C



Table A-2 – Dates, times and weather conditions during MBS

Visit No.	Date	Start	Finish	Weather conditions
Northern				
1	15/04/25	08:00	11:00	Light Drizzle, Wind ENE F2, Cloud Cover 8/8, Visibility 1-3km, Temp 8C to 11C
2	15/05/25	08:30	11:30	Dry, Wind ENE F1, Cloud Cover 0/8, Visibility >3km, Temp 11C to 17C
3	10/06/25	08:20	11:30	Dry, Wind W F2, Cloud Cover 8/8, Visibility 1km, Temp 14C to 16C
4	09/07/25	10:15	12:20	Dry, Wind W F1, Cloud Cover 7/8, Visibility >3km, Temp 19C to 22C
Southern				
1	16/04/25	10:37	13:28	Dry, Wind W F5, Cloud Cover 6/8, Visibility 1-3km, Temp 10C to 11C
2	13/05/25	08:30	12:00	Dry, Wind E F2, Cloud Cover 3/8, Visibility >3km, Temp 10C to 16C
3	11/06/25	09:24	11:00	Dry, Wind SE F1, Cloud Cover 2/8, Visibility >3km, Temp 15C to 17C
4	08/07/25	09:35	12:52	Dry, Wind WSW F2, Cloud Cover 7/8, Visibility >3km, Temp 17C to 21C

Table A-3 – Dates, times and weather conditions during nightjar surveys

Visit No.	Transect No.	Date	Start	Finish	Weather conditions
1	Northern	10/06/25	21:30	22:32	Dry, Wind NW F1, Cloud Cover 0/8, Visibility 1-3km, Temp 16C to 13C
1	Southern	10/06/25	21:12	22:48	Dry, Wind NW F1, Cloud Cover 0/8, Visibility 1-3km, Temp 16C to 13C
2	Northern	09/07/25	21:30	23:45	Dry, Wind W F2, Cloud Cover 4/8, Visibility >3km, Temp 14C to 12C



Visit No.	Transect No.	Date	Start	Finish	Weather conditions
2	Southern	08/07/25	21:45	23:00	Dry, Wind NW F3, Cloud Cover 4/8, Visibility >3km, Temp 13C to 11C

Table A-4 – Dates, times and weather conditions during breeding raptor walkover surveys

Visit No.	Date	Start	Finish	Weather conditions
Northern				
1	17/04/25	07:41	10:04	Dry, Wind ESE F2, Cloud Cover 4/8, Visibility >3km, Temp 6C to 11C
2	14/05/25	8:45	12:00	Dry, Wind ENE F2, Cloud Cover 0/8, Visibility >3km, Temp 13C to 20C
3	13/06/25	09:00	11:55	Dry, Wind SW F2, Cloud Cover 4/8, Visibility >3km, Temp 15C to 19C
4	10/07/25	09:30	13:00	Dry, Wind W F2, Cloud Cover 2/8, Visibility >3km, Temp 19C to 27C
Southern				
1	17/04/25	07:30	10:45	Dry, Wind ESE F2, Cloud Cover 4/8, Visibility >3km, Temp 6C to 11C
2	15/05/25	08:00	11:00	Dry, Wind NE F1, Cloud Cover 0/8, Visibility >3km, Temp 8C to 16C
3	11/06/25	11:00	13:00	Dry, Wind SE F1, Cloud Cover 2/8, Visibility >3km, Temp 15C to 17C
4	10/07/25	13:00	14:30	Dry, Wind W F2, Cloud Cover 4/8, Visibility >3km, Temp 19C to 27C



APPENDIX B – SURVEY RESULTS

Table B-1 – VP survey results

VP Ref	Date	Time	VP	No. of birds	Height band	Flight time (secs)	Total flight time (secs)*	Notes
Red Kite								
VP2	17/04/25	11:04	2	1	A-B	120	120	Around VP
VP1	13/05/25	09:50	1	1	B	150	150	To SE and SSE of VP
VP1	13/05/25	10:03	1	1	B	35	35	NW and WNW of VP
VP1	13/05/25	12:32	1	1	B	210	210	Flying through viewshed to SW of VP
VP1	13/05/25	12:35	1	1	B	120	120	SW and S of VP
VP1	13/05/25	12:42	1	1	B	30	30	SSE and SE of VP
VP1	13/05/25	13:29	1	1	B	210	210	SW to NW of VP
VP2	14/05/25	11:02	2	1	B	120	120	Flying from WSW to NW
VP2	10/06/25	09:59	2	1	B	40	40	N/A
VP2	10/06/25	10:11	2	1	B+A	60	60	N/A
VP2	10/06/25	10:25	2	1	A+B	210	210	N/A
VP2	10/06/25	10:27	2	1	B	100	100	N/A



VP Ref	Date	Time	VP	No. of birds	Height band	Flight time (secs)	Total flight time (secs)*	Notes
VP2	10/06/25	10:54	2	1	B	120	120	N/A
VP1	11/06/25	13:24	1	1	A+B	35	35	N/A
VP1	08/07/25	10:40	1	1	B	10	10	Flew to woodland
VP1	08/07/25	10:40	1	1	A	3	3	Landed in trees
VP1	08/07/25	11:45	1	1	B	18	18	Lost over horizon
VP2	09/07/25	11:34	2	1	B	36	36	Use of thermal out of VP
VP2	09/07/25	11:34	2	1	C	32	32	Soaring out of VP
VP2	09/07/25	11:34	2	1	B	11	11	N/A
VP2	09/07/25	11:34	2	1	C	82	82	Lost to view
VP2	09/07/25	11:38	2	1	C	382	382	N/A
VP2	09/07/25	13:31	2	1	B	21	21	N/A
VP2	09/07/25	13:31	2	1	C	42	42	N/A
VP2	09/07/25	13:40	2	1	C	122	122	N/A
VP2	09/07/25	13:40	2	1	B	116	116	N/A
VP2	09/07/25	13:53	2	1	A	10	10	Lifted from trees

VP Ref	Date	Time	VP	No. of birds	Height band	Flight time (secs)	Total flight time (secs)*	Notes
VP2	09/07/25	13:53	2	1	B	54	54	N/A
VP2	09/07/25	13:53	2	1	C	43	43	Landed in trees
VP2	09/07/25	14:13	2	1	A	11	11	N/A
VP2	09/07/25	14:13	2	1	B	20	20	N/A
VP2	09/07/25	14:13	2	1	A	9	9	N/A
VP2	09/07/25	14:34	2	1	C	367	367	N/A
VP2	09/07/25	14:34	2	1	B	23	23	Thermalled out of VP
VP1	29/07/25	15:05	1	1	B	45	45	N/A
VP2	30/07/25	10:59	2	1	B	60	60	N/A
VP2	30/07/25	11:55	2	1	B+C	240	240	N/A
Kestrel								
VP2	14/05/25	10:59	2	1	B	45	45	To SE of VP
VP2	14/05/25	12:58	2	1	B	130	130	Male flying through viewshed with prey
VP1	08/07/25	09:55	1	1	B	3	3	Flew into woodland after briefly hovering

* Where the observed flight was by more than one bird, flight time is the sum of all individuals (i.e. recorded flight time multiplied by the number of birds).



Table B-2 – MBS results

Site	Date	Time	No. of birds	Visit No.	Count	Activity	Notes
Snipe							
Southern	16/04/25	10:50	1	1	1	Took flight	Flushed by the surveyor

Table B-3 – Nightjar survey results

Site	Date	Time	Survey	Count	Activity	Notes
Nightjar						
Northern	10/06/25	21:51	1	1	Calling	Churring in pines
Northern	10/06/25	21:57	1	1	Flight	Continuous flight oversight, flight calls
Northern	10/06/25	22:01	1	1	Calling	Churring
Northern	10/06/25	22:05	1	2	Dispute	Pair wing clapping then settled, and both churring
Northern	10/06/25	22:12	1	1	Calling	Churring
Southern	10/06/25	21:52	1	1	Singing	N/A
Southern	10/06/25	22:06	1	1	Singing	N/A
Southern	08/07/25	10:05	2	1	Calling	Churring – bird not seen
Southern	08/07/25	10:20	2	1	Flight	Display flight
Northern	09/07/25	11:04	2	1	Flight	Flight calls, likely female



Site	Date	Time	Survey	Count	Activity	Notes
Northern	09/07/25	11:25	2	1	Calling	Brief churring, then taken flight with flight calls

Table B-4 – Breeding Raptor Walkover Survey results

Site	Date	Survey	Nest Count	Activity	Notes
Sparrowhawk					
Southern	10/07/25	Breeding Raptor Walkover Survey 4	1	Adult carrying food	Male seen been entering the plantation woodland with food, likely nest.



Table B-5 – Incidental records

Site	Date	Time	Survey	Count	Activity	Notes
Red Kite						
Southern	13/05/25	10:23	MBS 2	1	Foraging	Foraging in a sheep grazed field
Southern	08/07/25	10:15	MBS 4	1	Flight	Flying over recently cut grassland
Southern	08/07/25	10:20	MBS 4	1	Flight	In flight
Southern	08/07/25	11:50	MBS 4	1	Flight	In flight
Kestrel						
Southern	13/05/25	08:49	MBS 2	1	Foraging	N/A
Southern	13/05/25	10:17	MBS 2	1	Foraging	N/A
Southern	13/05/25	11:33	MBS 2	1	Foraging	N/A

APPENDIX C – SPECIES LIST

Table C-1 – Species names

British Name	Scientific name	British Name	Scientific name
Barn owl	<i>Tyto alba</i>	Mallard	<i>Anas platyrhynchos</i>
Bullfinch	<i>Pyrrhula pyrrhula</i>	Marsh harrier	<i>Circus aeruginosus</i>
Buzzard	<i>Buteo buteo</i>	Merlin	<i>Falco columbarius</i>
Canada goose	<i>Branta canadensis</i>	Linnet	<i>Linaria cannabina</i>
Common sandpiper	<i>Actitis hypoleucos</i>	Mute Swan	<i>Cygnus olor</i>
Crossbill	<i>Loxia curvirostra</i>	Nightjar	<i>Caprimulgus europaeus</i>
Cuckoo	<i>Cuculus canorus</i>	Osprey	<i>Pandion halieatus</i>
Curlew	<i>Numenius arquata</i>	Peregrine	<i>Falco peregrinus</i>
Dipper	<i>Cinclus cinclus</i>	Pintail	<i>Anas acuta</i>
Dotterel	<i>Charadrius morinellus</i>	Raven	<i>Corvus corax</i>
Dunnock	<i>Prunella modularis</i>	Reed Bunting	<i>Emberiza schoeniclus</i>
Dunlin	<i>Calidris alpina</i>	Red kite	<i>Milvus milvus</i>
Golden plover	<i>Pluvialis apricaria</i>	Redshank	<i>Tringa totanus</i>
Goshawk	<i>Accipiter gentilis</i>	Short-eared owl	<i>Asio flammeus</i>
Grasshopper Warbler	<i>Locustella naevia</i>	Skylark	<i>Alauda arvensis</i>
Great black-backed gull	<i>Larus marinus</i>	Snipe	<i>Gallinago gallinago</i>
Hen harrier	<i>Circus cyaneus</i>	Sparrowhawk	<i>Accipiter nisus</i>
Herring gull	<i>Larus argentatus</i>	Starling	<i>Sturnus vulgaris</i>
Honey-buzzard	<i>Pernis apivorus</i>	Swift	<i>Apus apus</i>
House Martin	<i>Delichon urbicum</i>	Tree Pipit	<i>Anthus trivialis</i>
House Sparrow	<i>Passer domesticus</i>	Tawny Owl	<i>Strix aluco</i>
Kestrel	<i>Falco tinnunculus</i>		
Lapwing	<i>Vanellus vanellus</i>		
Lesser black-backed gull	<i>Larus fuscus</i>		



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PUBLIC

Otter Survey Report



PENNANT WALTERS

FOEL TRAWSNANT GRID CONNECTION

OTTER SURVEY REPORT





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APPENDICES

APPENDIX A

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EXECUTIVE SUMMARY

WSP UK Ltd (WSP) was commissioned by Pennant Walters to undertake otter *Lutra lutra* surveys to support the Development of National Significance (DNS) application for the proposed Foel Trawsnant Wind Farm electricity network infrastructure connection, 'the Proposed Development'. The Proposed Development will be located west of Maesteg, in South Wales.

The Proposed Development will comprise 66 kilovolt (kV) overhead lines (OHL) and underground cables (UGC), which will provide a connection between the Foel Trawsnant Wind Farm and the wider national grid. Whilst the entire connection will require DNS consent, the requirement is triggered by the OHL section. This report focuses mostly on the OHL route, (the 'Site'), however, the UGC proposed route is considered at the point at which it is proposed to temporarily impact Nant Sychbant. The impact to Nant Sychbant will enable the installation of the UGC, which will involve installing a temporary dam and laying the cable through an open cut method.

Following the recommendation within the Preliminary Ecological Appraisal (PEA) (WSP, 2025^a), otter surveys were carried out over four watercourses and their surrounding riparian habitat. These included Watercourse 1: Nant y Ffyllon; Watercourse 2: Nant Lluest-wen; Watercourse 3: Nant y Castell; and Watercourse 4: Nant Sychbant. Surveys were carried out within 200m up and downstream of the Site/proposed temporary dam location at each of these watercourses to establish whether otter were present or likely absent and make recommendations as to how the Proposed Development should account for these species.

Two surveys per watercourse were carried out over five dates: 23 April, 12 May, 20 June, 9 September and 9 October 2025. Suitable habitat for resting, foraging and commuting otter was identified during the survey of Watercourse 4: Nant y Sychbant. An otter slide, evidencing confirmed otter presence, was identified adjacent to a suitable resting site beyond 30m from the proposed temporary dam location. Overall, seven potential resting sites and one confirmed (Resting Site (RS)7) were identified along Watercourse 4 and tributaries, however the confirmed resting site was considered at significant distance from the proposed temporary dam location (170m) to not be at risk of disturbance. Furthermore, no further signs were identified at Watercourse 4 during the second survey, and there was no evidence of the slide at RS7, indicating occasional, rather than regular, use. No field signs, or potential/confirmed resting sites were identified along Watercourse 1-3. These watercourses were considered suitable for commuting otter, however, there were limited foraging opportunities.

With no confirmed signs of otter presence identified with Watercourse 1, 2 and 3, nor within 30m of the proposed temporary dam location during the survey within Watercourse 4, there was no requirement for further survey such as camera trapping surveillance. However, due to the suitability of the watercourses and adjoining habitat for commuting and resting otter (with foraging suitability within Watercourse 4), it was recommended that suitable habitat for otter should be avoided where possible. Further recommendations are provided in this report, inclusive of avoidance and mitigation measures, and measures to support a Net Benefit for Biodiversity (NBB) for the Proposed Development.

1 INTRODUCTION

1.1 PROJECT BACKGROUND

- 1.1.1. WSP UK Ltd (WSP) was commissioned by Pennant Walters to support a Development of National Significance (DNS) application for the proposed Foel Trawsnant Wind Farm electricity network infrastructure connection. The proposals are located between Bridgend and Neath Port Talbot Counties in South Wales, west of Maesteg. To support this application, WSP was commissioned to undertake otter *Lutra lutra* surveys of suitable habitats.
- 1.1.2. The proposals, hereafter referred to as the 'Proposed Development,' comprise 66 kilovolt (kV) overhead lines (OHL) and underground cables (UGC), which will provide a connection between the Foel Trawsnant Wind Farm and the wider national grid. The existing OHL (approximately 2km south-west of the settlement of Llangynwyd (British National Grid: SS841874)) will serve as the connection point for the proposals. The connection will consist of approximately 5.1km of UGC and approximately 3.9km of OHL. Whilst the requirement for a DNS application is triggered by the OHL section, the whole of the connection will require DNS consent. This report focuses mostly on the OHL section.
- 1.1.3. In general, it has not been necessary to consider the UGC section as the UGC will be located beneath roads and therefore is not considered to affect ecological receptors. However, there are two locations which are exceptions to this. One location within the UGC boundary is required for tree felling to enable the works. This tree removal is not relevant to or likely to impact otters and therefore is not discussed within this report. However, the UGC also crosses one watercourse, Nant Sychbant, where a temporary dam will be required to enable the installation of the UGC. The temporary dam will enable the laying of a cable using an open cut method, following best environmental practice. For this reason, this watercourse is considered as part of the assessment, in addition to those crossing the OHL route. This is considered as a temporary impact. No additional impacts are anticipated to habitats along the rest of the UGC route.

1.2 ECOLOGICAL BACKGROUND

- 1.2.1. In September and October 2024, a Preliminary Ecological Appraisal (PEA) was carried out by WSP (WSP, 2025a) of the OHL route, hereafter referred to as the 'Site', as shown on Figure 8F-1. An additional buffer area of 50m around the Site was also surveyed and is hereafter referred to as the 'PEA Survey Area'. This supplemented a CSA Environmental PEA report which was produced in October 2024 (CSA Environmental, 2024a).
- 1.2.2. As part of the PEA carried out by WSP, a desk study was carried out which identified a total of three records of otter within 2km of the Site within the last 10 years. The nearest otter record was 873m west of the northern section of the Site, near to Nant Cynon. Nant Cynon is a watercourse which was recorded in the vicinity of the Site but was not identified to have hydrological connectivity with any of the watercourses flowing within the Site or PEA Survey Area. It did, however, have functional habitat connectivity to the PEA Survey Area via extensive woodland habitat, which was suitable for terrestrial commuting and resting of otters. The otter record near to Nant Cynon comprised a characteristic otter spraint containing fish bones within connecting woodland parcel. The Phase 1 habitat survey identified suitable habitat for otters within the PEA Survey Area in the form of riparian

habitats including watercourses and adjacent woodland parcels. There was no evidence of otter within the PEA Survey Area and no potential resting sites were identified. However, a thorough search of all watercourses and a buffer appropriate to otter was beyond the scope of the PEA and was therefore not conducted. It was recommended that follow-up otter surveys should be conducted to fully understand the extent to which otters may be using watercourses proposed to be impacted by the Proposed Development. These were recommended to be carried out during different seasons to provide results which are more representative of a full survey year, and to increase the opportunity of identifying otter/signs of otter, should they be present.

1.3 BRIEF AND OBJECTIVES

- 1.3.1. Pennant Walters commissioned WSP to complete an otter survey in accordance with good practice guidance (Chanin, 2003; and South Wales Otter Trust, 2024) to:
- Establish whether otter were present or likely to be absent from watercourses proposed to be impacted by the Proposed Development; and
 - If present, evaluate the importance of the relevant watercourses for otter and make recommendations as to how the Proposed Development should account for these species with respect to legislation, planning and biodiversity policy.
- 1.3.2. The results of the full suite of otter surveys, and subsequent recommendations, are included within this report.

2 METHODS

2.1 OVERVIEW

- 2.1.1. To establish whether otter were present or likely to be absent from the Site, otter surveys were conducted. The survey methodology followed current good practice guidance (Chanin, 2003; and South Wales Otter Trust, 2024).

2.2 HABITAT SURVEY

- 2.2.1. An assessment of the habitat suitability for otter was undertaken of all suitable watercourses and associated habitats proposed to be impacted by the Proposed Development, as part of the presence/likely absence surveys in Section 2.3.
- 2.2.2. The habitat survey was conducted during the first visit to each of the Watercourses. See survey dates provided in Table 2-1.
- 2.2.3. These comprised:
- Watercourse 1: Nant y Ffyllon; centred at approx. SS 84654 93233.
 - Watercourse 2: Nant Lliest-wen; centred at approx. SS 84510 88904.
 - Watercourse 3: Nant y Castell; centred at approx. SS 84629 88725.
 - Watercourse 4: Nant Sychbant; centred at approx. SS 84287 90356.
- 2.2.4. The locations of these watercourses, plus a 200m survey buffer up and downstream either side of the Site or proposed temporary dam location, are shown on Figure 8F-1.
- 2.2.5. The habitats and features of Watercourses 1-4 were assessed for their suitability to support otter. This included: broad habitat type, bank substrate, vegetation, disturbance level, bank profile, water depth, water speed and bordering land use.

2.3 PRESENCE/LIKELY ABSENCE SURVEYS

- 2.3.1. Each watercourse was required to be surveyed twice between April – October 2025 in accordance with good practice. Otter surveys can be carried out at any time of year, however surveys were not carried out after a spell of heavy rain as this may have limited the otter field signs available (Chanin, 2003).
- 2.3.2. Where safe access allowed, the entire length of the watercourses within the Site were subject to a thorough visual inspection of the banks, and up to 50m from the banks, for otter or their field signs. This survey was extended up to 200m up and downstream, where access allowed, and within adjacent woodland parcels.
- 2.3.3. Field signs for otter include: animals (alive or dead), feeding/prey remains, spraints, other secretions, pathways, slides, footprints, holts and couches. Holts and couches are hereafter collectively referred to as 'resting sites'. Features that have high potential to be attractive to otter were examined, including bases of large trees, dense vegetation, confluences of watercourses and culverts.
- 2.3.4. Information was recorded using a handheld device with installed Geographical Information System (GIS) software. This was used to record the location of each field sign or feature, with photographs taken (shown within Appendix A), and details recorded.

2.4 DATES OF SURVEY

- 2.4.1. The otter surveys were carried out by two members of the Chartered Institute of Ecology and Environmental Management (CIEEM) with experience of carrying out otter surveys.
- 2.4.2. Survey dates are summarised in Table 2-1 below:

Table 2-1 - Dates of survey

Watercourse	Survey number by date	
	1	2
Watercourse 1: Nant y Ffyllon	12 May	9 October
Watercourse 2: Nant Llust-wen	23 April	9 October
Watercourse 3: Nant y Castell	12 May	9 October
Watercourse 4: Nant Sychbant	20 June	9 September

2.5 NOTES AND LIMITATIONS

- Terrain surrounding the southern section of Watercourse 1: Nant y Ffyllon was very steep and in some sections the watercourse was inaccessible due to health and safety concerns. This equated to approximately 10% of the watercourse section proposed for survey. Where inaccessible, surveys were conducted from vantage points using binoculars. This was not considered a significant limitation as the majority of the watercourse could be surveyed in detail with no signs of otter identified.
- Approximately 10% of Watercourse 3: Nant y Castell was heavily and densely vegetated and not accessible to survey. This was not considered a significant limitation as the majority of the watercourse could be surveyed in detail with no signs of otter identified.
- Otter surveys can be carried out at any time of year. Guidance suggests that autumn and late winter/early spring are optimal survey periods due to the lower level of vegetation cover and associated improved visibility (South Wales Otter Trust, 2024). However, there is also an advantage to carrying out surveys between May-September due to water levels being less variable (Chanin, 2003). By planning surveys at different times of year, i.e., April, May, June, September and October, this accounts for these different considerations and potential environmental variables.

3 RESULTS

3.1 OVERVIEW

- 3.1.1. Suitable habitat for resting, foraging and commuting otter was identified during the survey of Watercourse 4: Nant y Sychbant conducted on 20 June. Evidence of confirmed otter presence was identified in the form of an otter slide adjacent to a suitable resting site (Resting Site (RS)7), [REDACTED] There were also several suitable potential resting sites identified along the watercourse and its tributaries within 200m of the Site. No further signs were identified at Watercourse 4 during the second survey, and there was no evidence of the slide, indicating occasional, rather than regular, use by otter at RS7.
- 3.1.2. No field signs, or potential/confirmed resting sites were identified whilst surveying Watercourse 1-3 during either visit. These watercourses were considered suitable for commuting otter, however, there were limited foraging opportunities.
- 3.1.3. Watercourses 1-3 all lie upstream of watercourses with known fish abundance. There are also no watercourse connections upstream of the Watercourses. This makes it less likely that otters will commute into Watercourses 1-3 from the more suitable downstream habitats but cannot be entirely ruled out.
- 3.1.4. Furthermore, the adjacent woodland parcels surrounding Watercourse 1, 2 and 4 provide potential habitat for commuting and resting.

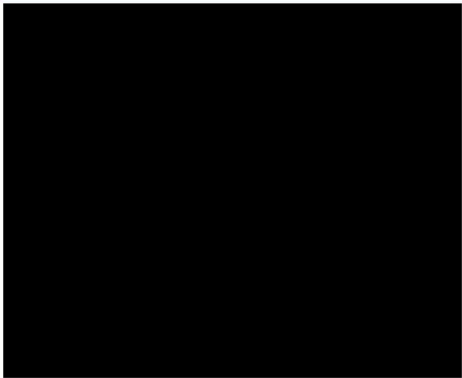
3.2 HABITAT SURVEY RESULTS

- 3.2.1. The results of the habitat survey of Watercourses 1-4 are detailed below in Table 3-1. Photographs are provided in Appendix A

Table 3-1 - Habitat survey results for Watercourses 1-4

	Watercourse 1: Nant y Ffyllon	Watercourse 2: Nant Lluest-wen	Watercourse 3: Nant y Castell	Watercourse 4: Nant Sychbant
Central grid reference	SS 84654 93233 (Start: SS 84461 93353; End: SS 84707 93019)	SS 84510 88904 (Start: SS 84333 88823; End: SS 84688 89005)	SS 84629 88725 (Start: SS 84507 88552; End: SS 84750 88854)	
Description	Nant y Ffyllon flows along the edge of a forestry and open fen/purple moor-grass <i>Molinia caerulea</i>/marshy grassland and rush pasture and acid grassland habitat. The northern end of the surveyed part of the watercourse was very densely vegetated and formed a part of an areas of 'fen' Priority Habitat. The watercourse at the northern end of the surveyed part of the watercourse was narrow and shallow and had a moderate flow.	Nant y Lluest-wen flows eastward within a parcel of broadleaved woodland in the southern section of the Site. The river flowed at a moderate speed. It had a stone/shingle substrate. The banks were vegetated as per the surrounding woodland habitat. In some sections the banks were solid earth which could be walked on and in other sections the banks comprised a thick mud which was not solid enough to walk over.	Nant y Castell flows north-east within agricultural fields with sheep and lambs grazing. The river itself is bordered by lines of trees and/or bramble <i>Rubus fruticosus</i> agg. scrub which shaded the steep and mostly vegetated banks. However, there were numerous access locations to the water for sheep. The watercourse was approximately 2m wide with a rocky/shingle substrate and a moderate flow. This watercourse showed signs of potential dredging in order to artificially straighten and revegetate the banks.	At the time of survey, the river had a fast flow despite the dry spell of weather prior to the survey. The watercourse was very shallow within the unnamed tributary and as little as 1m wide. The watercourse became deeper and wider as it flowed downstream into Nant Sychbant.

	Watercourse 1: Nant y Ffyllon	Watercourse 2: Nant Lluest-wen	Watercourse 3: Nant y Castell	Watercourse 4: Nant Sychbant
	As the stream flowed southward, the course followed into a steep gully with dense scrub habitat bordering both sides. At this point the stream widened up to 1.5m wide and had a fast flow. At its most southern extent within the watercourse there were possible signs of iron deposition shown by an orange/rust colouring in the river sediment.			Fish were observed within the watercourse and its tributary (Nant y Goblyn) including minnow <i>Phoxinus phoxinus</i> and stickleback <i>Gasterosteus aculeatus</i>.
% surveyed	90%	100%	90%	100%
Shore/bank	Earth banks	Earth/mud banks	Earth/rock banks	Earth/sand banks
Bordering habitat	In the northern section: fen/purple moor-grass/marshy grassland and rush pasture and acid grassland habitat. In the southern section: dense scrub and broadleaved woodland.	Broadleaved woodland.	Agricultural fields and tree line/scrub.	Mixed woodland. It should be noted that Japanese knotweed <i>Reynoutria japonica</i> was recorded within the bordering habitat.
Disturbance	Limited disturbance due to remoteness and limited signs of agricultural activity.	Some localised access to sheep grazing, although most of the woodland is fenced off	Agricultural disturbance including sheep grazing with access to the watercourse.	Human and livestock disturbance was recorded at the western extent of the watercourse, including within

	Watercourse 1: Nant y Ffyllon	Watercourse 2: Nant Lluest-wen	Watercourse 3: Nant y Castell	Watercourse 4: Nant Sychbant
		and therefore disturbance is limited.		tributaries with habitats becoming less disturbed as the watercourse flowed downstream towards the east.
Water speed	Moderate in the highly vegetation northern section, and fast as it flows into the steep gully.	Fast.	Moderate.	Fast.
Depth	<0.5m	<0.5m	<0.5m	<0.5m – 1m
Width	0.5m – 1.5m	Up to 4.5m	Approx 2m	1m – 10m
Wider habitat connectivity	Watercourse 1: Nant y Ffyllon flows through a drain network under a residential estate into Afon Llynfi which is a tributary of the River Wye, known to support brown trout <i>Salmo trutta</i> and hence known for fishing activity. Otter has been historically identified within this watercourse and provides good foraging opportunities. However, the connectivity is weak due to the highly urban nature and long stretch of underground draining.	Watercourse 2: Nant y Lluest-wen flows into Nant y Cerdin and then into Afon Llynfi (approx. 2.5km from the Site) which is a tributary of the River Wye, known to support brown trout and hence known for fishing activity. There is no watercourse connection upstream of Watercourse 2: Nant y Lluest-wen.	Watercourse 3: Nant y Castell flows into Nant y Gadlys and then into Afon Llynfi (approx. 2.5km from the Site) which is a tributary of the River Wye, known to support brown trout and hence known for fishing activity. There is no watercourse connection upstream of Watercourse 3: Nant y Castell	

	Watercourse 1: Nant y Ffyllon	Watercourse 2: Nant Lluest-wen	Watercourse 3: Nant y Castell	Watercourse 4: Nant Sychbant
	Habitat connectivity for commuting otter is considered better via the adjacent woodland parcel to the west of the watercourse which has connectivity with Nant Cynon and Afon Afan, both known to historically support otter. There is no watercourse connection upstream of Watercourse 1: Nant y Ffyllon.			
Suitable for otter?	Yes - commuting and resting up within the adjoining woodland habitat.	Yes – commuting and resting up within the adjoining woodland habitat.	Yes – poor commuting habitat.	Yes – resting, commuting and foraging. Resting up suitability also within the adjoining woodland habitat.

3.3 PRESENCE/LIKELY ABSENCE RESULTS

- 3.3.1. Seven potential and one confirmed resting sites were identified within Watercourse 4: Nant Sychbant and its tributaries during the first survey, on 20 June 2025. The locations of these features are shown on Figure 8F-1, with photographs shown in Appendix A. A description of each feature is provided in Table 3-2.
- 3.3.2. No additional signs were identified at Watercourse 4 during the second survey. It should be noted that there was no evidence of the slide at RS7 during the second visit, indicating only occasional use by otter.

Table 3-2 - Potential and confirmed otter features identified within Watercourse 4: Nant Sychbant and its tributaries

Feature type/reference	Location	Distance from proposed temporary dam location	Suitability	Description
Resting site (RS)1	Unnamed watercourse	58m northwest	Potential	Located within the bankside. There were no signs or evidence or signs of recent use, but a mammal path was recorded leading to/from river. The watercourse at this location was recorded as very low, less than 10cm deep.
RS2	Nant y Goblyn	80m west	Potential	Located within the earth bank and supported by a root system. There were no signs of evidence, but mammal path was recorded leading to and from the river. Fish were observed in river at this location.
RS3	Nant Sychbant	83m east	Potential	Located within a small cavity within the base of a tree near to the bankside. It was considered as a suitable resting site for a smaller otter. No definitive evidence of otter presence was recorded. A potential otter footprint was recorded but was not confirmed. There was a mammal path leading to and from watercourse/footprint location. Mammal path continues beyond RS4. Fish were observed in river at this location.
RS4	Unnamed watercourse	85m northwest	Potential	Located within the bankside, under a tree root system, providing a large area for potential resting otter. There were no signs or otter presence. The watercourse at this location was recorded as very low, less than 10cm deep.

Feature type/reference	Location	Distance from proposed temporary dam location	Suitability	Description
RS5	Nant Sychbant	154m east	Potential	Located within the bankside. It has suitability for use when water levels are low. There was no evidence of otter presence recorded.
RS6	Nant Sychbant	162m east	Potential	Located within the bankside. It has suitability for use when water levels are low. There was no evidence of otter presence recorded. Furthermore, a spider web was recorded over entrance indicating no recent use. Inside the resting site the surface was very smooth.
RS7	Nant Sychbant	170m east	Confirmed	Located within the bankside. A definitive otter slide was recorded leading down to watercourse, with a path also leading up to resting site.
RS8	Nant Sychbant	192m east	Potential	Located within the bankside. It has suitability for use when water levels are low. There was no evidence of otter presence recorded.

- 3.3.3. All of the potential resting sites were located >30m from the location at which the temporary dam is proposed to be installed. The closest potential resting sites to the proposed temporary dam locations were RS1 and RS2, which were 58m northwest and 80m west from the proposed temporary dam location respectively. Whilst beyond 30m from the proposed temporary dam location, it should be noted that a confirmed otter resting site was recorded [REDACTED] (RS7). This was confirmed by the presence of an otter slide leading away from the resting place into the watercourse. RS7 was deemed to be occasionally used by otters as the otter slide was no longer present during the second survey. Furthermore, RS7 was considered at significant distance from the proposed temporary dam location ([REDACTED]) to not be at risk of disturbance.
- 3.3.4. During both surveys within Watercourses 1, 2 and 3, no signs of otter presence within any of the watercourses were recorded.
- 3.3.5. No confirmed resting sites were identified within 30m of the proposed temporary dam location during the visits and therefore there is not considered a requirement for camera trapping surveillance as is detailed in good practice guidance (South Wales Otter Trust, 2024; CIEEM, 2024).

4 DISCUSSION

4.1 OVERVIEW

- 4.1.1. Otter presence was confirmed within Watercourse 4: Nant Sychbant and its tributaries during the first survey. Whilst presence was confirmed beyond 30m from the proposed temporary dam location, the presence of a confirmed resting site with occasional use (RS7) by otter suggests that otters are using the watercourse for foraging, commuting and resting activities. It was determined that Watercourse 4: Nant Sychbant had habitats to support resting, commuting and foraging otter, with the adjoining woodlands also providing suitable habitat to support resting otter.
- 4.1.2. No signs of otter presence were identified during Watercourses 1, 2 and 3 during either survey. The surveys indicated that the habitats have suitability for commuting otter. This is due to the suitability of riparian habitats surrounded by woodland and/or open rural habitat. Watercourse 1: Nant y Ffyllon and Watercourse 2: Nant Lluest-wen had more suitability for commuting otter than Watercourse 3: Nant y Castell. This is because Watercourse 3: Nant y Castell was highly disturbed by grazing sheep and lambs with limited woodland cover in the surroundings. Watercourses 1 and 2 also were connected to adjoining woodland parcels which provide suitability for resting otter, although no evidence of this activity was found during the survey.
- 4.1.3. Foraging opportunities were limited within Watercourses 1,2 and 3 due to their shallow depth. The watercourses may provide some suitable spawning opportunities for fish, and reptiles and amphibians are known to be present within the Site which also provide a food source to otter. However, this is not considered a prime foraging location and is likely only opportunistically used as such. In addition to this, watercourse connections downstream are known to support fish and are likely far more suitable foraging habitat for otter. This makes it less likely that otters will commute into Watercourses 1-3 from the more suitable downstream habitats but cannot be entirely ruled out.
- 4.1.4. With no confirmed signs of otter presence identified with Watercourse 1, 2 and 3, nor within 30m of the proposed temporary dam location during the survey, there is not considered a requirement for camera trapping surveillance as is detailed in good practice guidance (South Wales Otter Trust, 2024; CIEEM, 2024).
- 4.1.5. The confirmed resting site (RS7) which was identified [REDACTED] of the proposed temporary dam location along Watercourse 4 is considered at significant distance from the proposed temporary dam location ([REDACTED]) to not be at risk of disturbance.
- 4.1.6. Otters are protected from killing, injury and disturbance under European and UK legislation; in addition, planning policy affords further protection within the planning system, as described below. A summary of the legislation and planning policy is given in section 4.2 below.
- 4.1.7. The results of this survey are considered valid for up to two years, after which an updated survey would be required.

4.2 LEGAL COMPLIANCE

- 4.2.1. Otter are fully protected under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) (HMSO, 1981) and Countryside Rights of Way Act 2000 (HMSO, 2000).

- 4.2.2. Otter are also listed as Priority Species in accordance with Section 7 of the Environment (Wales) Act 2016 (HMSO, 2016). Public bodies have an obligation under Section 7 to have regard for these species when carrying out their functions.
- 4.2.3. The European Commission (EC) Habitats Directive and EC Birds Directive is transposed into UK law via the Conservation of Habitats and Species (Amendment) (EU Exit) Regulations (as amended) (HMSO, 2019), commonly referred to as the Habitats Regulations. Otter is listed under Annex IV of the Habitats Directive and therefore requires strict protection, and is known as a European Protected Species (EPS).
- 4.2.4. Otter are also listed under Annex II of the Habitats Directive and are afforded protection by the establishment of core areas of habitat known as Special Areas of Conservation. This means this species are a relevant consideration in a Habitats Regulations Assessment (HRA).

4.3 PLANNING POLICY COMPLIANCE

- 4.3.1. At the national level the Planning Policy Wales (PPW) (Welsh Government, 2024) forms the basis for planning system decisions with respect to conserving and enhancing the natural environment, including protected species such as otter.
- 4.3.2. PPW (Edition 12, 2024) states:

“A Resilient Wales can be supported by protecting and providing sufficient scale, extent, diversity and connectivity within, and between, landscapes and habitats to maintain and enhance biodiversity and the resilience of ecosystems. This support will enable them to withstand the pressures of change, to tackle pollution, to protect and enhance water resources, to protect soils and to enable flood mitigation, the creation of carbon sinks (especially in urban areas), and to promote opportunities for social and economic activity based on valuing and enabling access to the natural, historic and built environment.”
- 4.3.3. The PPW sets out, amongst other points, how at an overview level the ‘planning system should contribute to and enhance the national and local environment by:
 - *...recognising... the wider benefits of ecosystem services; and*
 - *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government’s commitment to halt the overall decline in biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures...’.*
- 4.3.4. A list of principles which local planning authorities should follow when determining planning applications is included in the PPW, and includes the following:
 - *‘if significant harm resulting from a development cannot be avoided...adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
 - *...opportunities to incorporate biodiversity in and around developments should be encouraged; and*
 - *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland...unless the need for, and benefits of, the development in that location clearly outweigh the loss...’.*

- 4.3.5. Mitigation, compensation and enhancement measures are recommended in Section 5 to enable the Proposed Development to be compliant with the above legislation and planning policy.

5 RECOMMENDATIONS

5.1 AVOIDANCE AND MITIGATION MEASURES

- 5.1.1. Due to the suitability of Watercourse 4 for commuting, foraging and resting otter, and the suitability of Watercourses 1, 2 and 3 for commuting otter, it is recommended that all Watercourses (e.g. Watercourses 1-4) should be avoided during the Proposed Development as far as practicable. This is also inclusive of suitable riparian habitats such as the adjoining woodland parcels to Watercourses 1, 2 and 4, due to their potential suitability for commuting and resting.
- 5.1.2. Where works directly to Watercourses 1, 2, 3 or 4 are required, it is recommended that a pre-works check is carried out. The pre-works check should include a check of the section of the Watercourse proposed to be impacted as well as of adjoining riparian habitat within 50m where it is suitable for resting otter. The check should be carried out by a suitably qualified Ecological Clerk of Works (ECoW). This should be carried out immediately prior to any works being undertaken.
- 5.1.3. As no confirmed otter resting sites have been identified within 30m of the proposed temporary dam location during the survey there are no current licencing requirements for otters to allow the Proposed Development. However, should these be identified during further surveys or during the pre-works check, a European Protected Species (EPS) licence for otter may be required.
- 5.1.4. Furthermore, construction mitigation for the Proposed Development will be fulfilled through a Construction Environmental Management Plan (CEMP), under ecological supervision. The CEMP will include (but not be limited to) night working restrictions, pollution prevention measures, restriction on light spill onto suitable otter habitat, noise barriers and restricted access in order to reduce the disturbance to potential otter.

5.2 ECOLOGICAL ENHANCEMENT MEASURES

- 5.2.1. Net Benefit for Biodiversity (NBB) in association with development is required by PPW (Edition 12, 2024) and required under Section 6 of Part 1 of the Environment (Wales) Act 2016. The below recommendations aim to comply with a NBB approach, in the way of delivering an overall improvement in biodiversity with the absence of a metric. By engaging with these recommendations in the early stages of the Proposed Development, it is hoped that ecosystem resilience and wider ecosystem benefits can be achieved. This approach will support local authorities in achieving their Section 6 duty to “promote the resilience of ecosystems” when determining planning applications.
 - Long term management of habitat adjacent to Watercourses 1, 2, 3 and 4 should be considered to create an un-managed vegetative buffer along the banks at least 5m from the bank. This should include fencing to exclude livestock to reduce the impact of poaching of the banks and would provide additional cover and resting opportunities for otter using the watercourses; and
 - Provision of standing waterbodies to provide an additional foraging and resting resource for otter in the wider landscape.
- 5.2.2. These measures are detailed in the NBB report (WSP, 2025b), which would describe how the Proposed Development has followed the step-wise approach and would thus lead to an NBB, as well as how the Proposed Development aligns with the DECCA framework. The step-wise approach, and the DECCA framework, are both described in PPW (2024).

6 CONCLUSION

- 6.1.1. Overall, Watercourses 1-4 all provided suitable commuting habitat for otters, with suitable resting habitat present within the adjoining woodland parcels of Watercourses 1, 2 and 4. Foraging suitability was limited in Watercourses 1, 2 and 3, whilst the identification of a confirmed resting site (RS7) along Watercourse 4 on 20 June suggests that otters are using the watercourse for resting, foraging and commuting. It should be noted that no further signs were identified at Watercourse 4 during the second survey, and there was no evidence of the slide at RS7, indicating occasional, rather than regular, use by otter.
- 6.1.2. With no confirmed signs of otter presence identified with Watercourse 1, 2 and 3, nor within 30m of proposed temporary dam location (Watercourse 4) during the survey, there is not considered a requirement for camera trapping surveillance as is detailed in good practice guidance (South Wales Otter Trust, 2024; CIEEM, 2024).
- 6.1.3. The confirmed resting site which was identified [REDACTED] the proposed temporary dam location along Watercourse 4 is considered at significant distance from the proposed temporary dam location [REDACTED] to not be at risk of disturbance.
- 6.1.4. Due to the suitability of the Watercourses and adjoining habitat for commuting and resting otter (with foraging suitability within Watercourse 4), it is recommended that suitable habitat for otter should be avoided during the Proposed Development.
- 6.1.5. Where works directly to Watercourses 1, 2, 3 or 4 (and relevant adjoining habitat) are required, it is recommended that a pre-works check is carried out by a suitably qualified ECoW immediately prior to any works being undertaken.
- 6.1.6. As no confirmed otter resting sites have been identified within 30m of the Site or of the proposed temporary dam location during the survey, there are no current licencing requirements for otters to allow the Proposed Development. However, should these be identified during further surveys or during the pre-works check, an EPS licence for otter may be required.
- 6.1.7. Furthermore, construction mitigation for the Proposed Development will be fulfilled through a CEMP, under ecological supervision in order to reduce the disturbance to potential otter.
- 6.1.8. Ecological enhancement measures are also recommended to be implemented in order to support the Proposed Development in achieving NBB as is outlined as a requirement in policy.

7 REFERENCES

7.1 PROJECT REFERENCES

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- WSP. (2025^b). Foel Trawnsant Grid Connection. Net Benefit for Biodiversity Report. August 2025.

7.2 TECHNICAL REFERENCES

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- Welsh Government. (2024). Planning Policy Wales (PPW). Edition 12. 2024.

8 FIGURES

Figure 8F-1 – Site, Watercourse Locations and Survey Results

Appendix A

PHOTOGRAPHS



Figure A-1 - Photographs of Watercourse 1: Nant y Ffyllon

Photo 1 – Northern section of Nant y Ffyllon



Photo 2 – Northern section of Nant y Ffyllon

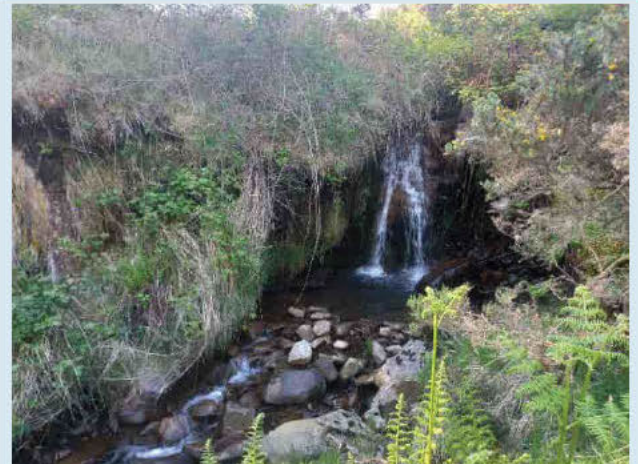


Photo 3 – Middle section of Nant y Ffyllon

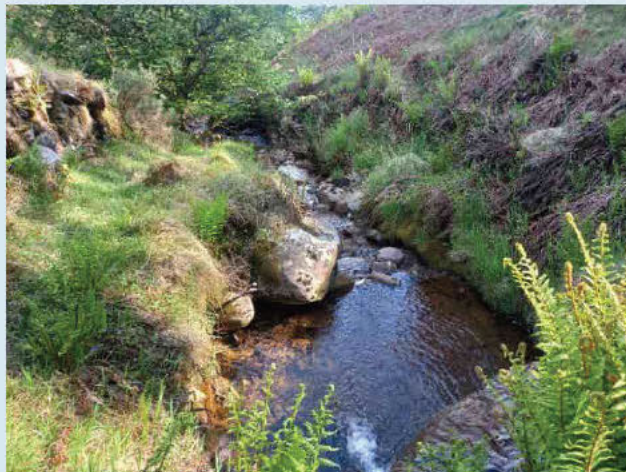


Photo 4 – Middle section of Nant y Ffyllon



Photo 5 – Lower section of Nant y Ffyllon

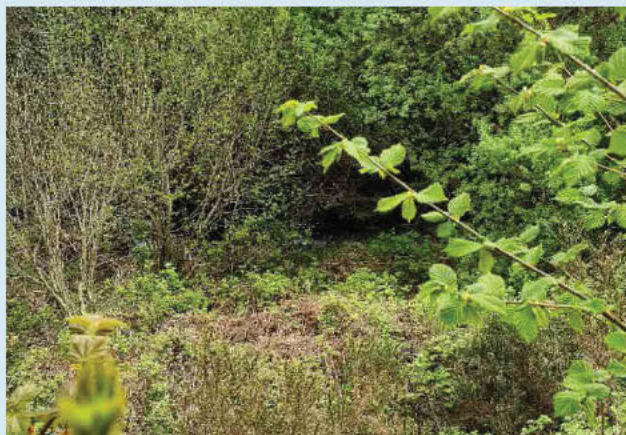


Photo 6 – Lower section of Nant y Ffyllon



Table A-2 - Photographs of Watercourse 2: Nant Lluest-wen

Photo 7 – Middle section of Nant Lluest-wen 	Photo 8 – Middle section of Nant Lluest-wen 
Photo 9 – Eastern section of Nant Lluest-wen 	Photo 10 – Western section of Nant Lluest-wen 

Table A-3 - Photographs of Watercourse 3: Nant y Castell

Photo 11 – Southern section of Nant y Castell



Photo 12 – Southern section of Nant y Castell



Photo 13 – Middle section of Nant y Castell



Photo 14 – Northeastern, vegetated section of Nant y Castell



Photo 15 – Northeastern section of Nant y Castell



Photo 16 – Northeastern section of Nant y Castell



Table A-4 - Photographs of Watercourse 4: Nant Sychbant, including otter RSs

Photo 17 – Nant y Goblyn	Photo 18 – Evidence of human disturbance along Nant y Goblyn
	
Photo 19 – Unnamed tributary	Photo 20 – Northern extent of unnamed tributary
	
Photo 21 – Nant Sychbant	Photo 22 – RS1
	

Photo 23 – RS2



Photo 24 – RS3



Photo 25 – RS4



Photo 26 – An unknown footprint at RS4



Photo 27 – RS5



Photo 28 – RS6



Photo 29 – RS7

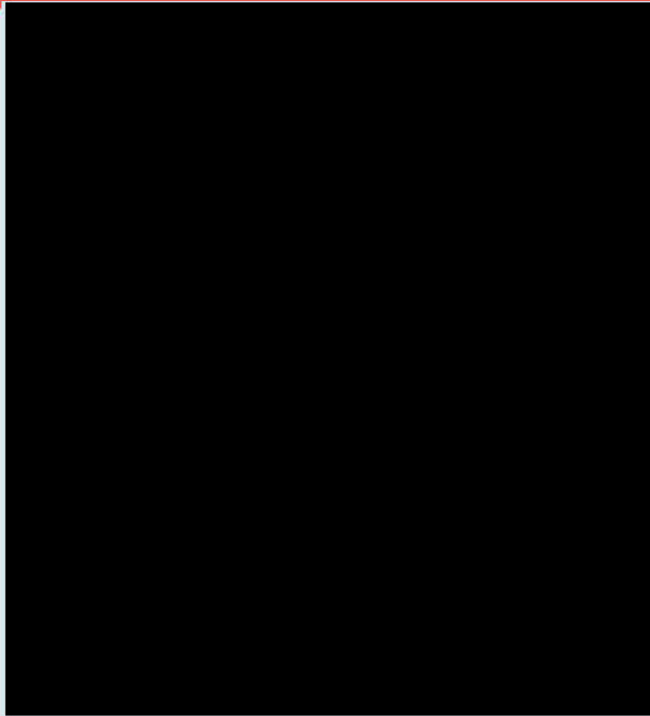
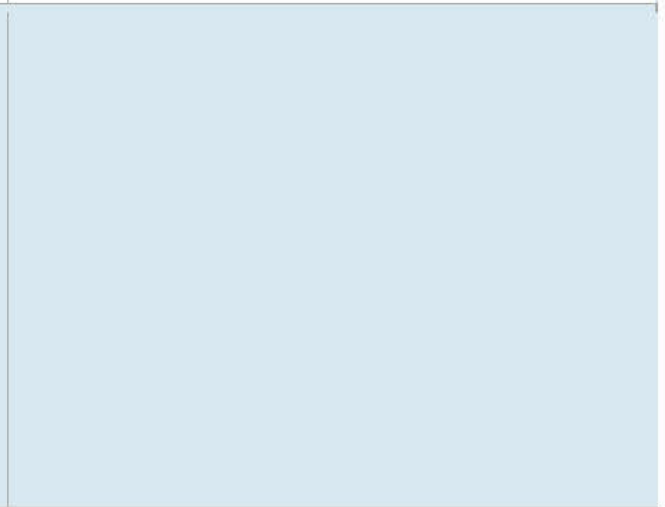


Photo 30 – An otter slide at RS7



Photo 31 – RS8





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PUBLIC

Bat Survey Report



Pennant Walters

FOEL TRAWSNANT GRID CONNECTION

BAT REPORT





Pennant Walters

FOEL TRAWSNANT GRID CONNECTION BAT REPORT

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APPENDICES

APPENDIX A

BAT ACTIVITY SURVEY DATA

EXECUTIVE SUMMARY

WSP UK Ltd (WSP) was commissioned by Pennant Walters to support a Development of National Significance (DNS) application for the proposed Foel Trawsnant Wind Farm electricity network infrastructure connection ('the Proposed Development'). The proposals are located between Bridgend and Neath Port Talbot Counties in South Wales, west of Maesteg ('the Site').

Ecological surveys carried out in 2024 (CSA Environmental, 2024^a; WSP, 2025^a) identified suitability for roosting, foraging and commuting bats within the Site. Following this, Pennant Walters commissioned WSP to undertake bat activity and roosting surveys in the form of automated static bat detector surveys, a Nighttime Bat Walkover (NBW) and close inspection tree survey. The results of these surveys and subsequent recommendations, are included within this report and are summarised below.

Overall, bat activity surveys within the Site recorded at least nine bat species including: common pipistrelle *Pipistrellus pipistrellus*; soprano pipistrelle *Pipistrellus pygmaeus*; Nathusius' pipistrelle *Pipistrellus nathusii*; Myotis bat species *Myotis sp.*; noctule *Nyctalus noctule*; serotine *Eptesicus serotinus*; Leisler's bat *Nyctalus leisleri*; brown long-eared *Plecotus auritus*; and lesser horseshoe *Rhinolophus hipposideros*.

Commuting and foraging activity was recorded along hedgerows, tree lines and along the edge of an ancient woodland within the Site. It was also recorded along a line of trees within the underground cables (UGC) tree felling area. For this reason, it was determined that the Proposed Development has the potential to impact bats through permanent and temporary removal of suitable habitats for commuting and foraging activities, in the absence of mitigation.

Whilst no bats were identified during the close inspection tree surveys, three trees (T2, T3 and T4) were identified as having suitability to support individual or small numbers of roosting bats (PRF-I). Of these, T2 and T4 had potential to be impacted by the Proposed Development by lopping of branches.

Recommendations are outlined within this report which follow a step-wise approach of firstly avoiding habitats and features sensitive to bats. Additional measures include:

- Replacement of habitats where these cannot be avoided.
- Sensitive lighting measures to be outlined in a Construction Environmental Management Plan (CEMP).
- A pre-works survey of all trees with bat roosting suitability which are anticipated to be impacted by the Proposed Development (T2 and T4 according to current design) should be carried out by a licenced bat ecologist immediately prior to works to ensure no bats are present.
- Incorporation of ecological enhancement measures to ensure compliance with policy.

1. INTRODUCTION

1.1. PROJECT BACKGROUND

- 1.1.1. WSP UK Ltd (WSP) was commissioned by Pennant Walters to support a Development of National Significance (DNS) application for the proposed Foel Trawsnant Wind Farm electricity network infrastructure connection. The proposals are located between Bridgend and Neath Port Talbot Counties in South Wales, west of Maesteg. To support this application, WSP was commissioned to undertake bat surveys of suitable habitats.
- 1.1.2. The proposals, hereafter referred to as the 'Proposed Development', comprise 66 kilovolt (kV) overhead lines (OHL) and underground cables (UGC), which will provide a connection between the Foel Trawsnant Wind Farm and the wider national grid. The existing OHL (approximately 2km south-west of the settlement of Llangynwyd (British National Grid: SS841874)) will serve as the connection point for the proposals. The connection will consist of approximately 5.1km of UGC and approximately 3.9km of OHL. Whilst the requirement for a DNS application is triggered by the OHL section, the whole of the connection will require DNS consent.
- 1.1.3. With regards to ecology, it has generally not been necessary to consider the UGC section, as the UGC will be located beneath roads and is not considered to affect ecological receptors. However, there are two locations which are exceptions to this. One location within the UGC boundary crosses the watercourse Nant Sychbant. The Nant Sychbant crossing will be undertaken through installing a temporary dam and laying the cable through an open cut method, following best environmental practice. As there will be no removal of habitat suitable for bats in this location, this watercourse is not considered further within this report in relation to bats. However, there is also a location within the UGC boundary which is required for localised and small-scale tree felling to enable the works. This is hereafter referred to as the 'UGC tree felling area' as its location is shown on Figure 8G-1. This activity has potential to impact roosting, commuting and foraging bats, should they be present. For this reason, this isolated section of the UGC boundary is included for ecological consideration in relation to bats.

1.2. ECOLOGICAL BACKGROUND

- 1.2.1. In September and October 2024, a Preliminary Ecological Appraisal (PEA) was carried out by WSP (WSP, 2025^a) of the OHL route, hereafter referred to as the 'Site', as shown on Figure 8G-1. An additional buffer area of 50m around the Site was also surveyed and is hereafter referred to as the 'PEA Survey Area' (see PEA and figures (WSP, 2025^a)). This supplemented a CSA Environmental PEA report which was produced in October 2024 (CSA Environmental, 2024^a).
- 1.2.2. As part of the PEA carried out by WSP, a desk study was carried out which identified a total of 31 records of at least eight different bat species were returned during the desk study. These were brown long-eared bat *Plecotus auritus*, common pipistrelle *Pipistrellus pipistrellus*, Daubenton's bat *Myotis daubentonii*, greater horseshoe bat *Rhinolophus ferrumequinum*, lesser horseshoe bat *Rhinolophus hipposideros*, Natterer's bat *Myotis nattereri*, noctule bat *Nyctalus noctule*, and soprano pipistrelle *Pipistrellus pygmaeus*. The desk study also returned records of bats that were not identified to species level: pipistrelle bat species *Pipistrellus sp.*, myotis bat species *Myotis sp.* and unknown bat species (*Chiroptera sp.*). The closest bat record was for a myotis bat 428m east of the southern section of the Site.

- 1.2.3. In addition to this, a Phase 1 habitat survey and a Daytime Bat Walkover (DBW) were carried out to support the PEA. These identified habitat of moderate suitability for commuting and foraging bats within the PEA Survey Area in the form of dense scrub, woodland, and linear habitats such as running water, tree lines and hedgerows.
- 1.2.4. Three trees were identified during the DBW with the potential to support roosting bats. These were all in the southern section of the PEA Survey Area and were between the Nant Lluest-Wen and Nant y Castell. There were no buildings or structures identified within the PEA Survey Area with potential to support roosting bats.
- 1.2.5. Further bat surveys were recommended in the form of close inspection tree surveys of the three identified trees with bat potential within the PEA Survey Area, as well as activity surveys in the form of automated static bat detector surveys and a Nighttime Bat Walkover (NBW).

1.3. BRIEF AND OBJECTIVES

- 1.3.1. Based on the recommendations provided in the update PEA, Pennant Walters commissioned WSP to complete updated bat surveys of the Site. The brief was to:
- Carry out close inspection tree surveys of the three identified with bat potential within the PEA Survey Area to further assess their suitability to support roosting bats;
 - Carry out bat activity surveys in the form of automated static bat detector survey and a NBW to assess the suitability of the Site to support commuting and foraging bats; and
 - Evaluate the overall value of the Site for roosting, commuting and foraging bats and make recommendations as to how proposals should account for bats with respect to legislation, planning and biodiversity policy.
- 1.3.2. The results of these surveys and subsequent recommendations are included within this report.

2. METHODS

2.1. BAT ACTIVITY SURVEYS

AUTOMATED DETECTOR SURVEY

2.1.1. In order to determine and understand bat activity across the Site, four automated static detectors (Song Meter Mini Bats) were installed in pre-determined locations each month for five nights per survey. Locations of the four automated static detectors are shown on Figure 8G-1 and are also listed below:

- Static 1, ///epic.learn.admit, SS 84761 92986.
- Static 2, ///robe.cars.mull, SS 84559 89548.
- Static 3, ///venue.scooters.negotiators, SS 84150 87443.
- Static 4, ///robe.tender.fonts, SS 84452 88948.

2.1.2. Surveys were carried out monthly between April – October 2025.

2.1.3. The detectors were set to commence recording at least 30 minutes before sunset and cease recording 30 minutes after sunrise. The recordings of bat echolocation calls collected during the surveys were analysed using specialist computer software (Kaleidoscope Pro V5.6.0), details are provided below.

2.1.4. Static bat detector surveys were carried out following good practice guidance (Collins, 2023).

NIGHTTIME BAT WALKOVER

2.1.5. A NBW was undertaken on 03 June 2025 to supplement the bat activity data collected during the automated bat static detector surveys. Two pre-determined transect routes were walked by two suitability experienced ecologists, following good practice guidance (Collins, 2023).

2.1.6. The transect routes were set out with the aim to focus survey efforts along suitable bat commuting and foraging corridors, and in particular, habitats vulnerable to impact by the Proposed Development. Transect Route 1 began on the northern side of a parcel of ancient woodland which is located towards the centre of the Site. The surveyors walked along the edge of the woodland from east to west until reaching a field boundary. The surveyors then followed a network of connected hedgerows northward. Transect Route 2 started two fields south of the same parcel of ancient woodland. The surveyors followed connected hedgerows from south to north until reaching the southern woodland edge and then walked along the edge of the woodland from east to west.

2.1.7. Listening points were incorporated along the ancient woodland and at one other strategic location. Transect Routes 1 and 2 and the four listening points are shown on Figure 8G-1.

2.1.8. During each transect the surveyors noted the bat species which had been heard and seen, including the time, location, and, where possible behaviour type and direction of flight. Surveyors stopped at the pre-determined listening points for approximately 5mins per stop. The walking survey began at 22:00, at least 30 minutes after sunset (as per guidance), and continued for approximately two hours. One hour was spent on each transect.

2.1.9. Surveyors were equipped with a Elekon Batlogger M1 bat detector to listen to and record bat activity. Calls registered by the bat detectors were recorded for later analysis using Kaleidoscope Pro, details are provided below.

DATA ANALYSIS

- 2.1.10. The recordings of bat echolocation calls collected during the surveys were analysed using Kaleidoscope Pro. The analysis enabled confirmation of species or species group based on call parameters, and the relative activity of different species of bats by counting the minimum number of bats recorded within discrete sound files. Once triggered by ultrasound, the Batlogger detectors record sound files with a duration of up to 15 seconds, which may contain a number of individual bat calls (or passes), or discrete groups of ultrasound 'pulses'.
- 2.1.11. It should be recognised that a series of separate sound files may represent a series of different bats commuting within the range of an automated detector, or a smaller number of bats repeatedly triggering the detector (e.g. bats making repeated foraging passes within the range of a detector).
- 2.1.12. Where possible, bat calls are identified to species level. However, if present, species of the genus *Myotis* are grouped together in most cases as their calls are similar in structure and have overlapping call parameters, making species identification problematic (Russ, 2013). For *Pipistrellus* species the following criteria based on measurements of peak frequency are used to classify calls:
- Common pipistrelle ≥ 42 and < 49 KHz;
 - Soprano pipistrelle ≥ 51 KHz;
 - Nathusius' pipistrelle *Pipistrellus nathusii* < 39 KHz;
 - Common/soprano pipistrelle ≥ 49 and < 51 KHz; and
 - Common/Nathusius pipistrelle ≥ 39 and < 42 KHz.
- 2.1.13. In addition, the following categories are used for calls which cannot be identified with confidence due to the overlap in call characteristics between species or species groups:
- *Myotis/Plecotus* sp.;
 - *Nyctalus* sp. (either Leisler's *Nyctalus leisleri* bat or noctule);
 - Serotine /Leisler's; and
 - Serotine/*Plecotus* sp.

BAT ACTIVITY INDEX

- 2.1.14. To ensure that results from each static detector location was comparable, the data was transformed to the number of bat passes per hour, for use as a Bat Activity Index (BAI), using the following equation:
- 2.1.15. Bat Activity Index =
$$\frac{\text{Total bat passes recorded at a location}}{\text{Total number of hours the detector was recording}}$$
- 2.1.16. This data transformation allows adjustment for the differences in the hours of recording due to detector failures or varying dates of deployment as well as the variations in night length throughout the year.

2.2. BAT ROOST SURVEYS

CLOSE INSPECTION TREE SURVEYS

- 2.2.1. Close inspection tree surveys were carried out on all trees previously identified as having bat roosting suitability and any additional trees with potential identified during the survey. This included a check within the UGC tree felling area which had not been surveyed previously for bat roosting

suitability. Inspections were carried out by two suitably experienced ecologists with appropriate licences and tree climbing certifications¹ on the 29 April 2025.

- 2.2.2. Inspections were carried out under safe working protocols (Arboricultural Association, 2020^a; and Arboricultural Association, 2020^b) and in accordance with best practice guidelines (Collins, 2023; Andrew, H., 2018) in order to assess the trees for PRFs. Inspections were undertaken using a small torch and endoscope (e.g. to search for bats, if any bats were present, and if not, to search for any evidence of bats having previously been present). Each tree was assigned an overall suitability grading. These include the following grades: PRF-I, PRF-M. If a tree was found to have no suitability for roosting bats it was described as 'none'. Further detail regarding these categorisations are provided in Table 2-1. This grading helps to establish whether follow up surveys are required for each tree.

Table 2-1 PRF Suitability Categorisation (Collins, 2023)

Category	Description	Further survey effort required
PRF-I	PRF is suitable for individual bats or very small numbers either due to size or lack of suitable surrounding habitats.	No further surveys required.
PRF-M	PRF is suitable for multiple bats and may therefore be used by a maternity colony.	At least two further surveys between May – August.

2.3. NOTES AND LIMITATIONS

- The ecological survey data collected as part of these reports is considered valid for 18-24 months (CIEEM, 2019) unless otherwise specified, for example if conditions are likely to change more quickly due to ecological processes or anticipated changes in management.
- The level of survey effort for the trees and buildings present on the Site were in line with industry best practice survey guidelines (Collins, 2023) and is therefore considered sufficient to establish the likely absence of bat roosts. However, bats typically demonstrate seasonal use of different roosts, and being highly mobile species, may be roosting elsewhere during the period a tree was surveyed. For this reason, bats may use the trees on Site but remain undetected.
- Static 1 and Static 2 in August did not record due to a technical fault. This is not considered a significant limitation as both other statics recorded five nights of data during August, and a full set of data has been collected at Static 1 and Static 2 for every other month. This provided enough data to enable a thorough assessment of the bat activity on Site.
- Only four nights of data were recorded for Static 1 during October and three nights for Static 1 in June. This was due to battery life not extending into the fifth day of recording. To mitigate this and ensure that the data is still comparable from each location and with other months, a BAI has been used.
- In July, August and September, six nights of data were recorded (with the exception of Static 1 and Static 2 in August where there was a technical fault resulting in no recordings). A BAI has

¹ City & Guilds/NPTC Level 2 Award in Tree Climbing and Rescue - units 206 and 306 and refresher training (where relevant)



been used to ensure that the data is still comparable from each location and with across survey months.

3. RESULTS

3.1. BAT ACTIVITY SURVEYS

3.1.1. Across all the bat activity surveys at least nine bat species were recorded within the Site. These species included:

- Common pipistrelle;
- Soprano pipistrelle;
- Nathusius' pipistrelle;
- Myotis bat species;
- Noctule;
- Serotine *Eptesicus serotinus*;
- Leisler's bat;
- Brown long-eared; and
- Lesser horseshoe.

3.1.2. All of these species were recorded during the automated detector surveys, whilst only a proportion of these were recorded during the NBW.

3.1.3. Further surveys results are provided below specific to each activity survey.

AUTOMATED DETECTOR SURVEY

3.1.4. During the April automated static surveys, the highest bat activity levels were recorded on Static 1 which was deployed on a coniferous tree line within the UGC tree felling area. The lowest bat activity levels were recorded on Static 3 which was the most southerly deployed static within a glade of forestry. Statics 1-3 identified common pipistrelle as the most recorded bat, with other bat species recorded at relatively low numbers. Conversely, Static 4 identified low numbers of common pipistrelle with most recordings identified to soprano pipistrelle. Furthermore, at Static 4 there was a relatively high proportion of brown long-eared bats compared to the rest of the Site. Static 4 is located on a field boundary immediately to the north of the ancient woodland located towards the centre of the Site.

3.1.5. During the May surveys, the highest bat activity levels were recorded on Static 2 which was deployed within a line of trees bordering an agricultural field in the northern extent of the southern section of the Site. The lowest bat activity levels were recorded on Static 3. Common pipistrelle was the most recorded bat across all of the statics within the Site, with relatively high numbers of soprano pipistrelle and species of Myotis bats recorded on Static 2 and 4.

3.1.6. During the June surveys, the highest bat activity levels were recorded on Static 2, and the lowest levels were recorded on Static 3. Common pipistrelle was the most recorded bat across Statics 1, 3 and 4. Soprano pipistrelle was the most recorded bat on Static 2, with common pipistrelle and species of Myotis bats close behind in frequency. Static 2 also identified three recordings of lesser horseshoe bat.

3.1.7. During the July surveys the highest bat activity levels were recorded on Static 2, which was deployed within a line of trees bordering an agricultural field in the northern extent of the southern section of the Site. The lowest levels of activity were recorded on Static 3, located within a glade of forestry in the southern part of the Site. Across all statics, common pipistrelle remained the most

frequently recorded species, representing the majority of detections at each location. Soprano pipistrelle was also well represented, particularly at Static 4 where it accounted for nearly half of all registrations. Myotis species were recorded at low to moderate levels, with the highest activity again noted at Static 2. Serotine and brown long-eared bats were detected occasionally across the Site, while lesser horseshoe bat was recorded once at Static 2 and Nathusius' pipistrelle was recorded in low numbers at Statics 3 and 4.

- 3.1.8. During the August surveys, Static 1 and 2 did not record any data due to a technical fault (see Section 2.3). As such, only Statics 3 and 4 provided usable data for the month. Of the operational detectors, Static 4 recorded the highest bat activity levels, while Static 3 recorded notably lower levels overall. Common pipistrelle remained the dominant species across both detectors, accounting for approximately two-thirds of all recordings on Static 3 and nearly half on Static 4. Soprano pipistrelle was also frequently detected, representing around one-third of all calls on Static 4. Myotis species activity was relatively low on Static 3 but more prominent on Static 4, where a range of other species was also recorded in low numbers, including serotine, Leisler's, Nathusius' pipistrelle, and brown long-eared bats.
- 3.1.9. During the September surveys the highest bat activity levels were recorded on Static 4, located along a field boundary north of the ancient woodland, while the lowest activity levels were recorded on Static 3, positioned within a glade of forestry. Across all detectors, common pipistrelle remained the most frequently recorded species, accounting for the vast majority of calls at every static. Soprano pipistrelle continued to be well represented, particularly on Statics 2 and 4, where it comprised a substantial proportion of total activity. Myotis species were recorded consistently across the Site, with the highest number of passes again detected on Static 4. Other species were recorded in low numbers, including serotine, Leisler's, noctule, and brown long-eared bats, while lesser horseshoe bat was detected twice at Static 4.
- 3.1.10. During the October surveys, the highest bat activity levels were recorded on Static 4, located along the field boundary north of the ancient woodland, while the lowest levels of activity were recorded on Static 3, positioned within a glade of forestry. Common pipistrelle continued to dominate recordings across all statics, accounting for over 95% of calls on Static 2 and more than 80% on Static 4. Soprano pipistrelle was the next most frequently recorded species, with small but consistent levels of activity at each location. Myotis species were detected at all statics, with relatively higher proportions at Static 1. Other species were detected infrequently, including noctule, and brown long-eared bats.
- 3.1.11. The bat data recorded during the static monitoring periods each month are summarised in Appendix A. Results of the automated detectors (Static 1 – 4; inclusive) are shown on Figure 8G-2.
- 3.1.12. Table 3-1 below shows the monthly totals for each bat species recorded between April and October 2025, together with the total time each static detector was deployed.
- 3.1.13. Table 3-2 provides the resulting BAI with the highest BAI for each species recorded highlighted in green.

Table 3-1 Static 1-4 locations monthly totals for passes recorded.

Static number	EPTSER	MYOSP	NYCLEI	NYCNO C	NYCSP	PIPNAT	PIPPIP	PIPPYG	PIPSP	PLEAUR	RHIHIP	Total time (hrs)
Static 1	36	152	13	0	1	9	3142	118	0	12	0	300.5
Static 2	0	1952	0	3	1	8	7391	3599	0	15	4	317.5
Static 3	2	59	3	22	0	8	510	125	4	6	0	365
Static 4	9	837	4	4	1	47	5688	2616	2	289	2	365
Total	47	3000	20	29	3	72	16731	6458	6	322	6	1348 hrs

Table 3-2 BAI for Static 1-4 showing static locations with the highest BAI for each species recorded highlighted in green

Static number	EPTSER	MYOSP	NYCLEI	NYCNOC	NYCSP	PIP NAT	PIPPIP	PIPPYG	PIPSP	PLEAUR	RHIHIP
Static 1	0.12	0.51	0.04	0	0	0.03	10.46	0.39	0	0.04	0
Static 2	0	6.15	0	0.01	0	0.03	23.28	11.34	0	0.05	0.01
Static 3	0.01	0.16	0.01	0.06	0	0.02	1.40	0.34	0.01	0.02	0
Static 4	0.02	2.29	0.01	0.01	0	0.13	15.58	7.17	0.01	0.96	0.01

NIGHTTIME BAT WALKOVER

- 3.1.14. During the NBW, a total of 83 bat recordings were processed within the 2-hour survey. Only a proportion of the bats listed above were identified. These included, in order of frequency; common pipistrelle, soprano pipistrelle, brown long-eared and species of myotis bats. The survey identified commuting and foraging activity along hedgerows, tree lines and along the edge of the ancient woodland parcel.
- 3.1.15. The bat data recorded during the NBW are summarised in Appendix A.

3.2. CLOSE INSPECTION TREE SURVEYS

- 3.2.1. The close inspection tree surveys were carried out of the three trees (T1 – T3) identified during the DBW which supported the 2024 PEA. In addition to these, one additional tree was identified to have bat roosting potential and was also included in the close inspection tree surveys (T4). No additional trees with bat roosting potential were identified within the UGC tree felling area.
- 3.2.2. T1 – T4 were all recorded in the southern section of the PEA Survey Area, between the Nant Lluest-Wen and Nant y Castell watercourses, with locations shown on Figure 8G-1.
- 3.2.3. The aerial (close) inspection survey assessed three trees (T2, T3 and T4) as having 'PRF-I' suitability (as per good practice survey guidance (Collins, 2023)) for supporting roosting bats, i.e., roosting suitability for individual or very small numbers of bats and unlikely to be used as a maternity or hibernation roost. On further inspection, it was found that one tree (T1) had no suitability for supporting roosting bats as the feature previously identified did not extend far enough back into the tree to provide adequate roosting opportunity. The suitability of T1 to support roosting bats was described as 'none' as per good practice survey guidance.
- 3.2.4. No bats were recorded during any of the close inspection tree surveys.
- 3.2.5. These trees will not be subject to complete removal, however, two of the trees identified (T2 and T4) are likely to be impacted by lopping of branches to support the installation of the OHL.
- 3.2.6. A summary of these results are shown in Table 3-3 below and within Figure 8G-3.

Table 3-3 Close inspection tree surveys results

Tree Ref	Description	Suitability	Likely to be lopped?
T1	A mature sessile oak adjacent to a fence line. A tear-out wound was identified on the south side of the tree, appearing to extend upwards into two chambers and downwards. On further inspection it was found the feature did not go in.	None	N/A
T2	A mature sessile oak identified on the same tree line as T1. It had a knothole on its south side at approximately 2m high, with an opening of 7cm x 7cm. The feature was found to extend up 25cm but not down. The substrate inside was rough, dry, dirty, with leaf litter.	PRF-I	Yes
T3	A mature sessile oak identified along a separate tree line to the south of T1 and T2. A tear-out wound was identified on its western side at 2.5m high, with an opening of 5cm x 5cm. The feature was found to extend upwards 25cm. The substrate inside was dry and it was recorded that tree bumble bee <i>Bombus hypnorum</i> and its honeycomb was present. A second feature was recorded on the same limb at 2m high, with a tight opening. The feature was recorded to extend up 7cm.	PRF-I	No
T4	A species of oak was identified as an additional tree with bat roosting potential to those previously identified. It was located immediately to the north between T1 and T2. The tree was identified to have a knothole present on its southern side at 1.5m high, with an opening of 7cm x 7cm. On further inspection the feature was found to extend up 10cm. The substrate inside was damp with slugs present within a bowl-like base.	PRF-I	Yes

4. IMPLICATIONS FOR DEVELOPMENT

4.1. OVERVIEW

COMMUTING AND FORAGING BATS

- 4.1.1. The Proposed Development has the potential to impact bats through permanent and temporary removal of suitable habitats for commuting and foraging activities.
- 4.1.2. The trees within the UGC tree felling area were identified during the automated detector surveys to provide a commuting and foraging route for common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, Myotis bat species; serotine, Leisler's bat and brown long-eared. With highest numbers recorded for common pipistrelle.
- 4.1.3. Commuting and foraging activity was recorded along hedgerows, tree lines and along the edge of the ancient woodland parcel within the Site. Although no further permanent removal of habitat is anticipated to support the Proposed Development, with the exception of one location within the UGC tree felling area, some tree lines, hedgerow and woodland parcels are likely to be subject to lopping of branches and temporary removal of understory.
- 4.1.4. Following a review of literature carried out to support the ES Chapter (WSP, 2025^b), there are several papers showing how bats can be impacted by elevated collision risk following the installation of wind turbines, however, the literature did not present information on collision impacts to bats resulting from OHLs. Collision risk with commuting bats during operation has therefore been scoped out and is not discussed further within this report. See the ES Chapter and ornithological report for measures to reduce direct mortality due to collision impact to birds during operation.

TREES

- 4.1.5. The Proposed Development has potential to affect trees with potential to support roosting bats (T2 and T4). These trees will not be removed in their entirety, however may be subject to lopping of branches which unless mitigation is carried out has potential to result in the loss, damage or disturbance of a bat roosting feature.
- 4.1.6. Whilst no bats were recorded within any of the tree surveys, bats are known to have a highly mobile and opportunistic nature and may start using a roosting site after it has been surveyed or may have been roosting somewhere else during the period it was surveyed. For this reason, bats may potentially be present but remain undetected.

4.2. LEGAL COMPLIANCE

- 4.2.1. The legislation and planning policy relevant to bats and their roosts is set out below. Recommendations as to how the legislation and planning policy may be satisfied are set out in Section 4.
- 4.2.2. Bats and their roosts are afforded a high level of protection under The Conservation of Habitats and Species Regulations 2017 (as amended) (Habitats Regulations) (HMSO, 2019), the legislation means that it is an offence to:
 - Deliberately capture, injure or kill a wild bat;
 - Deliberately disturb wild bats; *'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.';

and

- Damage or destroy a breeding site or resting place used by this species.

4.2.3. Protection is also afforded under the Wildlife and Countryside Act 1981 (as amended) (HMSO, 1981) with respect to disturbance of animals when using places of shelter, and obstruction of access to places of shelter.

4.2.4. Due to the high level of protection afforded to bats and their habitat, mitigation for this species is governed by a strict licensing procedure administered by Natural Resources Wales (NRW) (normally, planning permission must be obtained before a licence can be sought). Licencing is subject to three tests, as defined under the Habitat Regulations, these must also be applied by the planning authority before granting permission for activities affecting bats. For permission to be granted the following criteria must be satisfied:

- The proposal is necessary for '*preserving 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*';
- '*There is no satisfactory alternative*'; and
- 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*'.

4.2.5. Certain species of bats including the barbastelle bat *Barbastella barbastellus*, Bechstein's bat *Myotis bechsteinii*, noctule bat, brown long-eared bat, common pipistrelle, soprano pipistrelle bat, greater and lesser horseshoe bat are also listed as Priority Species under Section 7 of the Environment (Wales) Act 2016. Under Section 7 of the Environment (Wales) Act 2016, Welsh Ministers must take all reasonable steps to maintain and enhance the living organisms and types of habitats included on any list published under this section and encourage others to take such steps.

4.3. PLANNING POLICY COMPLIANCE

4.3.1. PPW (Edition 12, 2024) states:

"A Resilient Wales can be supported by protecting and providing sufficient scale, extent, diversity and connectivity within, and between, landscapes and habitats to maintain and enhance biodiversity and the resilience of ecosystems. This support will enable them to withstand the pressures of change, to tackle pollution, to protect and enhance water resources, to protect soils and to enable flood mitigation, the creation of carbon sinks (especially in urban areas), and to promote opportunities for social and economic activity based on valuing and enabling access to the natural, historic and built environment."

4.3.2. The PPW sets out, amongst other points, how at an overview level the '*planning system should contribute to and enhance the national and local environment by:*

- *...recognising... the wider benefits of ecosystem services; and*
- *minimising impacts on biodiversity and providing net gains in biodiversity where possible, contributing to the Government's commitment to halt the overall decline in biodiversity, including*

by establishing coherent ecological networks that are more resilient to current and future pressures...’.

- 4.3.3. A list of principles which local planning authorities should follow when determining planning applications is included in the PPW, and includes the following:
- *‘if significant harm resulting from a development cannot be avoided...adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;*
 - *...opportunities to incorporate biodiversity in and around developments should be encouraged; and*
 - *planning permission should be refused for development resulting in the loss or deterioration of irreplaceable habitats, including ancient woodland...unless the need for, and benefits of, the development in that location clearly outweigh the loss...’.*
- 4.3.4. Mitigation, compensation and enhancement measures are recommended in Section 4 to enable the Proposed Development to be compliant with the above legislation and planning policy.

5. RECOMMENDATIONS

5.1. AVOIDANCE AND MITIGATION MEASURES

- 5.1.1. Overall, permanent habitat loss has been avoided as far as possible in the design of the Proposed Development. This will be achieved by 'micro-siting' or precise placement of OHL poles. Permanent habitat loss has been minimised to only impact the UGC tree felling area and is anticipated to include 0.01Ha of tree loss.
- 5.1.2. All other habitat loss is considered temporary loss and will involve the temporary removal of woodland understory, including within the ancient woodland. No tree felling is anticipated outside of the UGC tree felling area, however, there will be some lopping of branches of trees within the woodland and tree lines which interfere with the OHL route, however, this will be minimised wherever possible.
- 5.1.3. Where habitat loss is anticipated, habitat replacement and enhancement is proposed as outlined in Section 4.4.
- 5.1.4. Furthermore, trees with bat roosting potential should be retained where possible. The Proposed Development design has allowed for the retention of T3.
- 5.1.5. Where trees with bat roosting potential cannot be avoided, further measures are outlined within Section 4.2 – Precautionary Methods.

5.2. PRECAUTIONARY METHODS

TREES

- 5.2.1. Although no evidence of use by bats was identified at the time of surveys, three trees were assessed as PRF-I roosts, meaning that they were suitable to support individual or small number of roosting bats. No further surveys are required to be carried out on these trees. However, owing to their highly mobile and opportunistic nature of roosting, bats may start using a roosting site after it has been surveyed or may have been roosting somewhere else during the period it was surveyed. Therefore, it is recommended that all trees with bat roosting suitability which are anticipated to be impacted by the Proposed Development (T2 and T4 according to current design) should be fully inspected by a licenced bat ecologist immediately prior to works to ensure no bats are present.
- 5.2.2. In the event that bats are found to be present during the pre-works survey, works would be postponed, and advice sought from NRW. It may be necessary to apply for a licence from NRW to allow the lawful removal of the tree.

5.3. LIGHTING

- 5.3.1. Lighting during the construction phase of the Proposed Development could have a negative effect upon bat activity on Site. Whilst works are anticipated to centre around day-light hours, it is possible that during the winter months some ad hoc site lighting may be required at the start or end of the work shift due to shorter day length.
- 5.3.2. To minimise impact of lighting on bat activity, the following measures are recommended to be outlined within a Construction Environmental Management Plan (CEMP):

- Construction works are currently programmed to start in January 2028 for a total of 9 months. There will be no night-time working with works taking place between 07:00 and 19:00 hours on weekdays and 07:00 to 13:00 on Saturdays. In exceptions, there may be a requirement for a 7-day work week. This would be agreed with the local council as appropriate.
- During the winter months when day length is shorter some site lighting will be required. Site lighting will be controlled to prevent incidental spillage on to features that may be used by nocturnal species.

5.3.3. Such control measures may include:

- Use of directional lighting to ensure only task areas are lit, avoiding direct illumination of retained trees, hedgerows, rough grassland and boundary vegetation features;
- Use the minimum light levels necessary for the relevant task/function, this may equate to reducing light intensity, and/or using the minimum number of light sources or minimum column height;
- Use narrow spectrum light sources where possible to lower the range of species affected by lighting, specifically avoiding shorter wavelength blue light, using instead warm/neutral colour temperature <4,200 kelvin lighting (Bat Conservation Trust (BCT), 2018); and
- Use light sources that emit minimal ultra-violet light to avoid attracting night-flying invertebrate species which in turn may attract bats to the light.

5.4. ECOLOGICAL ENHANCEMENT MEASURES

5.4.1. Net Benefit for Biodiversity (NBB) in association with development is required by PPW (Edition 12, 2024) and required under Section 6 of Part 1 of the Environment (Wales) Act 2016. The below recommendations aim to comply with a NBB approach, in the way of delivering an overall improvement in biodiversity with the absence of a metric. By engaging with these recommendations in the early stages of the Proposed Development, it is hoped that ecosystem resilience and wider ecosystem benefits can be achieved. This approach will support local authorities in achieving their Section 6 duty to “promote the resilience of ecosystems” when determining planning applications.

- Permanently removed trees which are proposed to be felled within the UGC tree felling area will be replaced at a 3:1 ratio. This will be achieved by planting additional tree lines throughout the Site.
- Planting of additional tree lines and also hedgerows will support in bolstering existing commuting and foraging routes for bats and also will create new routes, improving the connectivity within the Site and surroundings for bats.
- All temporarily removed grassland habitats or woodland ground flora will be translocated by turf layer translocation during the construction phase. This will follow appropriate methodology to avoid soil compaction. Turfs will be stored securely and will be reinstated as soon as is feasible.
- Existing habitats in poor condition for biodiversity, such as parcels of improved grassland, are proposed to be enhanced through incorporation of species-rich grassland seed mixes or plugged with suitable species recorded in adjacent species-rich habitats. Enhancing the floral diversity within the Site will improve the suitability for a greater variety of invertebrates, which provide more diverse foraging opportunities for bats.
- Installing of bat boxes on trees within the Site to provide additional roosting opportunities.

- 5.4.2. These measures are provided in more detail in the NBB report (WSP, 2025^c), which describes how the Proposed Development has followed the step-wise approach and leads to an NBB, aligning with the DECCA framework, as described in PPW (2024).

6. CONCLUSIONS

- 6.1.1. Overall, bat activity surveys within the Site recorded at least nine bat species including:
- Common pipistrelle;
 - Soprano pipistrelle;
 - Nathusius' pipistrelle;
 - Myotis bat species;
 - Noctule;
 - Serotine;
 - Leisler's bat;
 - Brown long-eared; and
 - Lesser horseshoe.
- 6.1.2. Commuting and foraging activity was recorded along hedgerows, tree lines and along the edge of the ancient woodland parcel within the Site. It was also recorded along the line of trees within the UGC tree felling area. For this reason, it was determined that the Proposed Development has the potential to impact bats through permanent and temporary removal of suitable habitats for commuting and foraging activities, in the absence of mitigation.
- 6.1.3. Whilst no bats were identified during the close inspection tree surveys, three trees (T2-T4) were identified as having suitability to support individual or small numbers of roosting bats (PRF-I). Of these, T2 and T4 have potential to be impacted by the Proposed Development by lopping of branches.
- 6.1.4. Recommendations are outlined within this report which follow a step-wise approach of avoiding habitats and features sensitive to bats in the first instance. Additional measures include:
- Replacement of habitats where these cannot be avoided.
 - Sensitive lighting measures to be outlined in a CEMP.
 - A pre-works survey of all trees with bat roosting suitability which are anticipated to be impacted by the Proposed Development (T2 and T4 according to current design) should be carried out by a licenced bat ecologist immediately prior to works to ensure no bats are present.
 - Incorporation of ecological enhancement measures to ensure compliance with policy.

7. REFERENCES

PROJECT REFERENCES

- CSA Environmental. (2024^a). Preliminary Ecological Appraisal. Foel Trawsnant Wind Farm. October 2024.
- WSP. (2025^a). Foel Trawsnant Grid Connection. Preliminary Ecological Appraisal. February 2025.
- WSP. (2025^b). Foel Trawsnant Grid Connection. Ecological Impact Assessment (EIA). August 2025.
- WSP. (2025^c). Foel Trawsnant Grid Connection. Net Benefit for Biodiversity Report. August 2025.

TECHNICAL REFERENCES

- Andrews, H. (2018) Bat Tree Habitat Key – Bat Roosts in Trees: A guide to identification and assessment for tree-care and ecology professionals. Pelagic Publishing. Exeter.
- Arboricultural Association (2020^a) Industry Code of Practice for Arboriculture: Tree Work at Height' (2nd edition 2020).
- Arboricultural Association (2020^a) Technical Guide 1, Tree climbing and Aerial Rescue.
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- CIEEM. (2019). Advice Note: On The Lifespan of Ecological Reports and Surveys.
- Collins J. (ed.) (2023) Bat Surveys for Professional Ecologists, Good Practice Guidelines (4th Edition). The Bat Conservation Trust, London.
- Her Majesty's Stationary Office (HMSO) (1981). Wildlife and Countryside Act (as amended by the Countryside and Rights of Way Act 2000).
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- Welsh Government. (2016). Environment (Wales) Act 2016.
- Welsh Government. (2024). Planning Policy Wales (PPW). (Edition 12) 2024.

8. FIGURES

Figure 8G-1 – Site Location and Bat Survey Locations

Figure 8G-2 – Bat Activity Survey Results

Figure 8G-3 – Close Inspection Tree Survey Results

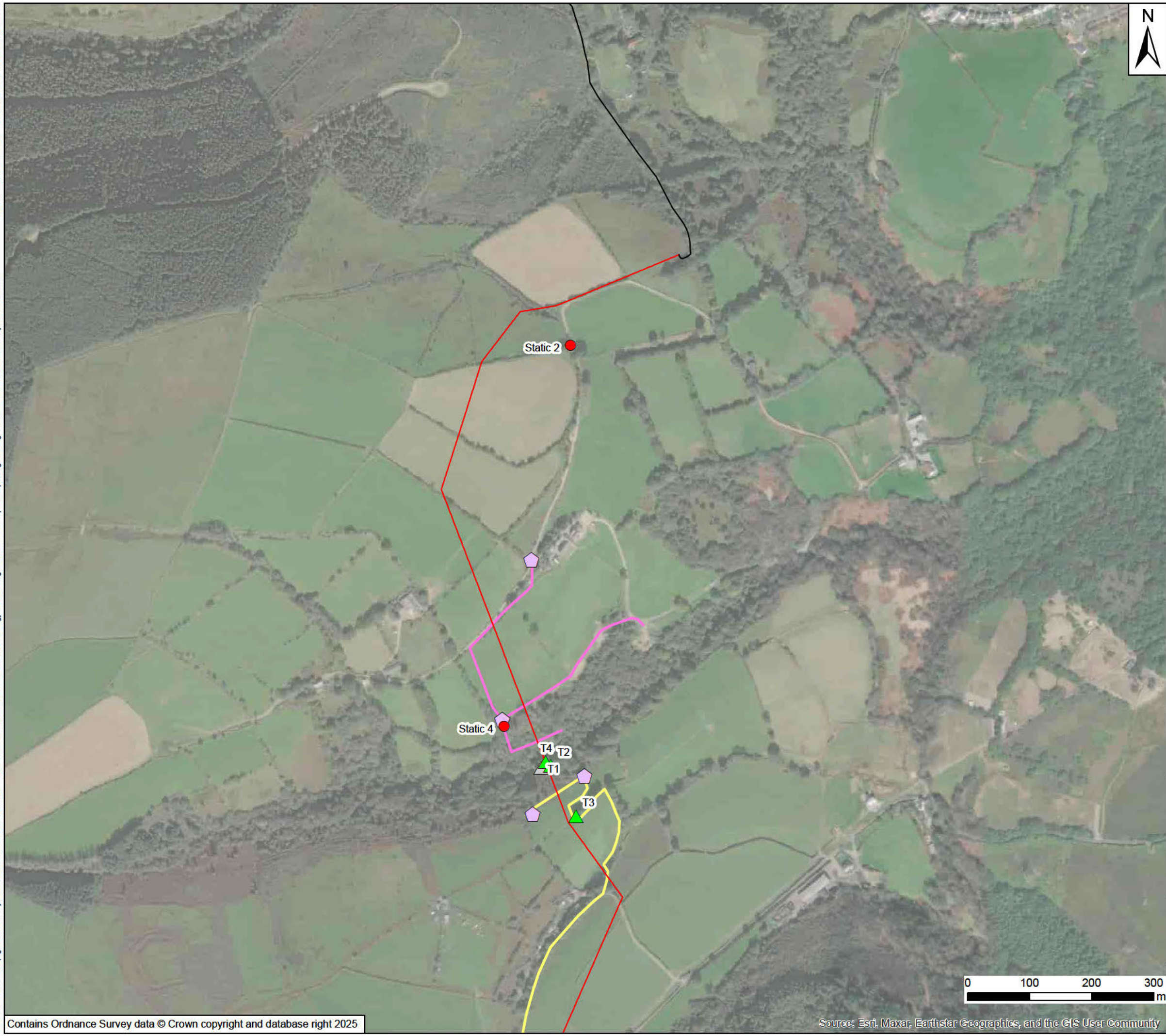


Legend

- Site - Overhead Line (OHL) proposed route
- Underground Cable (UGC) proposed route
- UGC tree felling area
- Static Detector Locations



Client:	PENNANT WALTERS		
Project:	FOEL TRAWSNANT BAT REPORT		
Title:	SITE LOCATION AND BAT SURVEY LOCATIONS		
Drawing No:	Figure 8G-1	Drawn:	AM
Date:	8/12/2025	Checked:	GP
Scale:	25000 @ A3	Approved:	GH



Legend

- Site - Overhead Line (OHL) proposed route
- Underground Cable (UGC) proposed route
- Bat Transect Route 1
- Bat Transect Route 2
- ◡ Listening Points
- Static Detector Locations
- Trees with bat roosting suitability**
 - ◡ None
 - ▲ PRF-I



Client:	PENNANT WALTERS		
Project:	FOEL TRAWSNANT BAT REPORT		
Title:	SITE LOCATION AND BAT SURVEY LOCATIONS		
Drawing No:	Figure 8G-1	Drawn:	AM
Date:	8/12/2025	Checked:	GP
Scale:	25000 @ A3	Approved:	GH



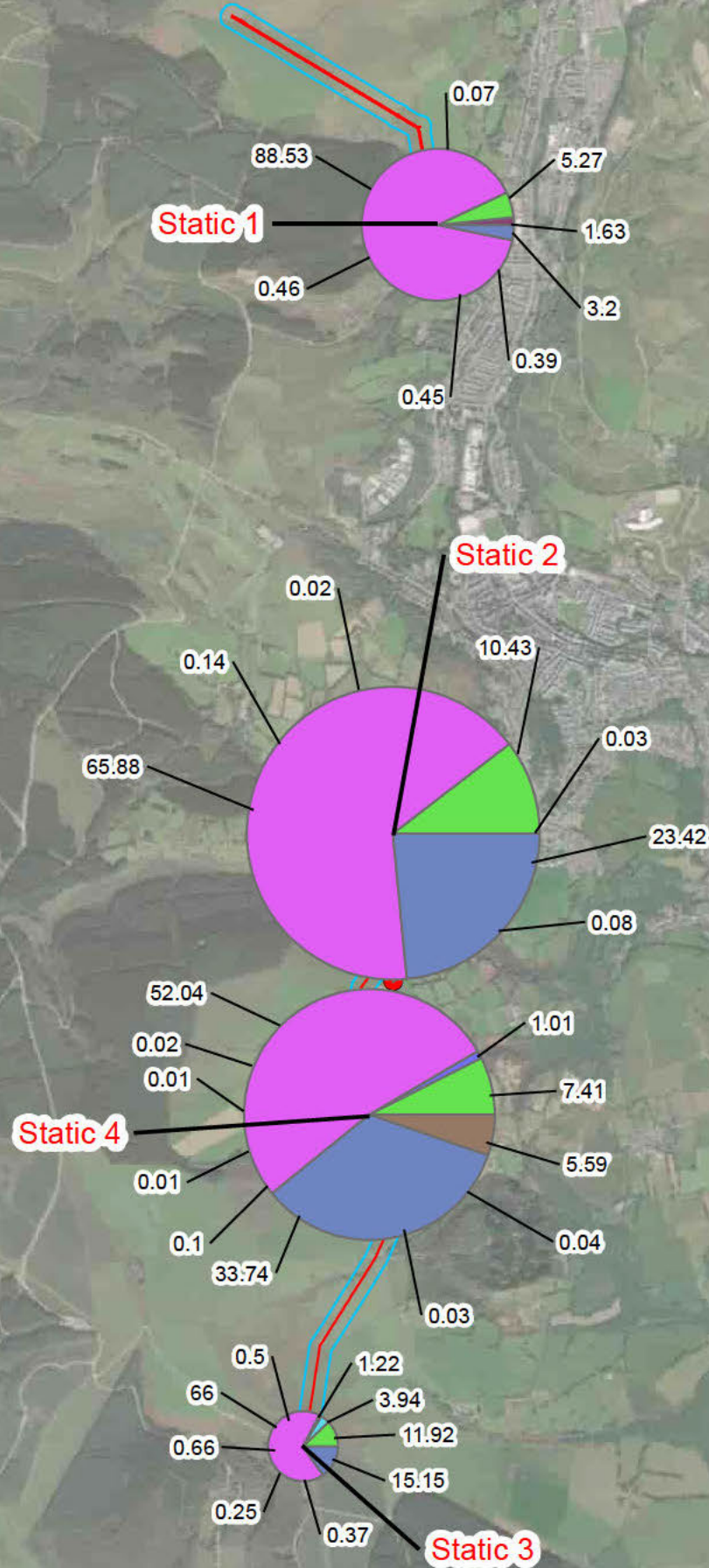
- Legend**
- Site - Overhead Line (OHL) proposed route
 - Bat Transect Route 2
 - Static Detector Locations



Client:	PENNANT WALTERS		
Project:	FOEL TRAWSNANT BAT REPORT		
Title:	SITE LOCATION AND BAT SURVEY LOCATIONS		
Drawing No:	Figure 8G-1	Drawn:	AM
Date:	8/12/2025	Checked:	GP
Scale:	25000 @ A3	Approved:	GH



Detector	Static 1	Static 2	Static 3	Static 4
Serotine Bat %	1.63	0	0.25	0.1
Myotis spp. %	5.27	10.43	11.92	7.41
Leisler's Bat %	0.39	0	0.37	0.04
Noctule Bat %	0	0.08	3.94	0.03
Nyctalus spp. %	0.07	0	0	0.01
Nathusius's pipistrelle %	0.46	0.03	1.22	1.01
Common pipistrelle %	88.53	65.88	66	52.04
Soprano pipistrelle %	3.2	23.42	15.15	33.74
Pipistrellus spp. %	0	0	0.5	0.02
Brown Long Eared %	0.45	0.14	0.66	5.59
Lesser Horseshoe Bat %	0	0.02	0	0.01



Legend

- Site
- Survey Area

Static Results

- 840
- Serotine Bat
- Myotis spp.
- Leisler's Bat
- Noctule Bat
- Nyctalus spp.
- Nathusius' pipistrelle
- Common pipistrelle
- Soprano pipistrelle
- Pipistrellus spp.
- Brown Long Eared
- Lesser Horseshoe Bat



Client: PENNANT WALTERS

Project: FOEL TRAWSNANT

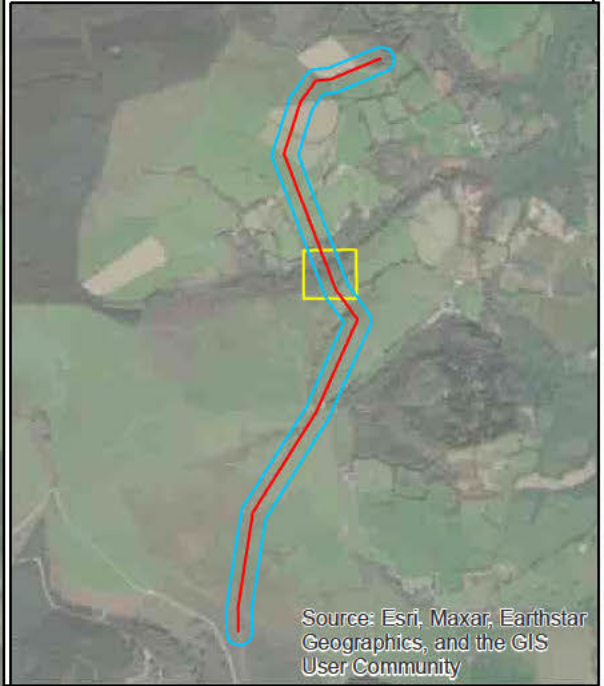
Title: BAT SURVEY RESULTS
Species distribution by percentage
(April - Oct 2025)

Drawing No: Figure 8G - 3
Date: 11/13/2025
Scale: 30000 @ A3
Drawn: MT
Checked: GH
Approved: GH

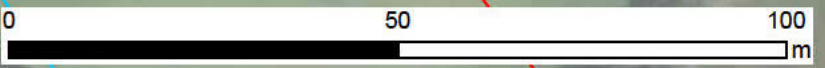


Legend

- Site
- PEA Survey Area
- Trees with bat roosting suitability**
 - △ None
 - ▲ PRF-I



Client:	PENNANT WALTERS		
Project:	FOEL TRAWSNANT BAT REPORT		
Title:	CLOSE INSPECTION TREE SURVEY RESULTS		
Drawing No:	Figure 8G-3	Drawn:	AM
Date:	6/26/2025	Checked:	GP
Scale:	972 @ A3	Approved:	GH



Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community

Appendix A

BAT ACTIVITY SURVEY DATA



Table A-1 – Summary of Bat Species Recorded during Automated Detector Survey April 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 1	SS 84761 92986	EPTSER	20	562	3.56%
		MYOSP	34		6.05%
		NYCLEI	12		2.14%
		PIP NAT	5		0.89%
		PIPPIP	472		83.99%
		PIPPYG	15		2.67%
		PLEAUR	4		0.71%
Static 2	SS 84559 89548	MYOSP	15	309	4.85%
		NYCNOC	1		0.32%
		PIPPIP	264		85.44%
		PIPPYG	28		9.06%
		PLEAUR	1		0.32%
Static 3	SS 84150 87443	MYOSP	4	105	3.81%
		PIPPIP	82		78.10%
		PIPPYG	17		16.19%
		PLEAUR	2		1.90%
Static 4	SS 84452 88948	MYOSP	19	618	3.07%
		PIP NAT	40		6.47%
		PIPPIP	3		0.49%
		PIPPYG	361		58.41%
		PLEAUR	195		31.55%

Table A-2 – Summary of Bat Species Recorded during Automated Detector Survey May 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 1	SS 84761 92986	EPTSER	3	444	0.68%
		MYOSP	16		3.60%
		NYCLEI	1		0.23%
		PIP NAT	2		0.45%
		PIPPIP	404		90.99%
		PIPPYG	13		2.93%
		PLEAUR	5		1.13%
Static 2	SS 84559 89548	MYOSP	204	1827	11.17%
		PIPPIP	1059		57.96%
		PIPPYG	563		30.82%
		PLEAUR	1		0.05%
Static 3	SS 84150 87443	MYOSP	6	162	3.70%
		NYCNOC	2		1.23%
		PIP NAT	6		3.70%
		PIPPIP	123		75.93%
		PIPPYG	23		14.20%
		PLEAUR	2		1.23%
Static 4	SS 84452 88948	MYOSP	229	1469	15.59%
		NYCLEI	3		0.20%
		PIP NAT	3		0.20%
		PIPPIP	743		50.58%
		PIPPYG	471		32.06%
		PLEAUR	20		1.36%

Table A-3 – Summary of Bat Species Recorded during Automated Detector Survey June 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 1	SS 84761 92986	MYOSP	1	142	0.70%
		PIP NAT	2		1.41%
		PIPPIP	135		95.07%
		PIPPYG	4		2.82%
Static 2	SS 84559 89548	MYOSP	1225	4266	28.72%
		PIP NAT	8		0.19%
		PIPPIP	1454		34.08%
		PIPPYG	1567		36.73%
		PLEAUR	9		0.21%
		RHIHIP	3		0.07%
Static 3	SS 84150 87443	MYOSP	6	24	25%
		PIP NAT	1		4.17%
		PIPPIP	16		66.67%
		PIPPYG	1		4.17%
Static 4	SS 84452 88948	MYOSP	14	751	1.86%
		PIPPIP	464		61.78%
		PIPPYG	260		34.62%
		PLEAUR	13		1.73%

Table A-4 – Summary of Bat Species Recorded during Automated Detector Survey July 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 1	SS 84761 92986	EPTSER	13	235	5.53%
		MYOSP	6		2.55%
		NYCSP	1		0.43%
		PIPPIP	207		88.09%
		PIPPYG	7		2.98%
		PLEAUR	1		0.43%
Static 2	SS 84559 89548	MYOSP	406	3919	10.36%
		NYCSP	1		0.03%
		PIPPIP	2649		67.59%
		PIPPYG	861		21.97%
		PLEAUR	1		0.03%
		RHIHIP	1		0.03%
Static 3	SS 84150 87443	MYOSP	12	156	7.69%
		NYCNOC	2		1.28%
		PIP NAT	1		0.64%
		PIPPIP	109		69.87%
		PIPPYG	31		19.87%
		PLEAUR	1		0.64%
Static 4	SS 84452 88948	EPTSER	2	929	0.22%
		MYOSP	47		5.06%
		PIP NAT	2		0.22%
		PIPPIP	409		44.03%
		PIPPYG	455		48.98%
		PLEAUR	14		1.50%

Table A-5 – Summary of Bat Species Recorded during Automated Detector Survey August 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 3	SS 84150 87443	MYOSP	14	146	9.59%
		PIPPIP	98		67.12%
		PIPPYG	34		23.29%
Static 4	SS 84452 88948	EPTSER	7	1397	0.50%
		MYOSP	182		13.03%
		NYCLEI	1		0.07%
		PIP NAT	2		0.14%
		PIPPIP	681		48.75%
		PIPPYG	495		35.43%
		PLEAUR	29		2.07%

Table A-6 – Summary of Bat Species Recorded during Automated Detector Survey September 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 1	SS 84761 92986	MYOSP	14	1646	0.85%
		PIPPIP	1572		95.50%
		PIPPYG	60		3.65%
Static 2	SS 84559 89548	MYOSP	83	1391	5.97%
		PIPPIP	757		54.42%
		PIPPYG	548		39.40%
		PLEAUR	3		0.22%
Static 3	SS 84150 87443	EPTSER	2	115	1.74%
		MYOSP	9		7.83%
		NYCLEI	3		2.61%
		NYCNOC	14		12.17%
		PIPPIP	68		59.13%
		PIPPYG	14		12.17%
		PIPSP	4		3.48%
		PLEAUR	1		0.87%
Static 4	SS 84452 88948	MYOSP	312	2836	11.00%
		NYCNOC	2		0.07%
		PIPPIP	2142		75.53%
		PIPPYG	369		13.01%
		PLEAUR	9		0.32%
		RHIHIP	2		0.07%

Table A-7 – Summary of Bat Species Recorded during Automated Detector Survey October 2025

Static Location	NGR	Species	Call numbers	Total Calls	Percentages
Static 1	SS 84761 92986	MYOSP	81	454	17.84%
		PIPPIP	352		77.53%
		PIPPYG	19		4.19%
		PLEAUR	2		0.44%
Static 2	SS 84559 89548	MYOSP	19	1261	1.51%
		NYCNOC	2		0.16%
		PIPPIP	1208		95.80%
		PIPPYG	32		2.54%
Static 3	SS 84150 87443	MYOSP	8	31	25.81%
		NYCNOC	4		12.90%
		PIPPIP	14		45.16%
		PIPPYG	5		16.13%
Static 4	SS 84452 88948	MYOSP	34	1499	2.27%
		NYCNOC	2		0.13%
		NYCSP	1		0.07%
		PIPPIP	1246		83.12%
		PIPPYG	205		13.68%
		PIPSP	2		0.13%
		PLEAUR	9		0.60%



Table A-8 – Summary of Bat Species Recorded during DBW

Species	No. of calls	Total Calls	%
MYOSP	4	119	3.361345
PIPPIP	76	119	63.86555
PIPPYG	38	119	31.93277
PLEAUR	1	119	0.840336



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