Beauly BESS

784-B066659

Bat Activity Survey Report

TNEI on behalf of Field Beauly Ltd

December 2024

Document prepared on behalf of Tetra Tech Limited. Registered in England number: 01959704

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ACRONYMS/ABBREVIATIONS

Acronyms/Abbreviations	Definition
ACIEEM	Associate Member of Chartered Institute of Ecology & Environmental Management
BCT	Bat Conservation Trust
BSI	British Standard Institute
CIEEM	Chartered Institute of Ecology & Environmental Management
Habitats Regulations	Conservation (Natural Habitats, &c.) Regulations 1994 (as amended)
LBAP	Local Biodiversity Action Plan
LPA	Local Planning Authority
MCIEEM	Member of Chartered Institute of Ecology & Environmental Management
NS	NatureScot
NPF	National Planning Framework
SAC	Special Area of Conservation
W&CA	Wildlife & Countryside Act 1981 (as amended)

EXECUTIVE SUMMARY

Contents	Summary
Site Location	The site is located approximately 1km south of Beauly in the Scottish Highlands and is centred at Ordnance Survey National Grid Reference NH 52446 44471.
Proposals	The Proposed Development is a Battery Energy Storage System (BESS) of up to 100 MW with associated infrastructure, earthworks, drainage, accesses and ancillary works (including landscaping and biodiversity enhancement).
Scope of this Survey(s)	Two static bat detectors were deployed on the site between July and October 2024.
Results	**Species Recorded**: Four bat species were identified: soprano pipistrelle, common pipistrelle, brown long-eared, and Myotis species. **Roosting Activity**: No roosting features were found within the site, but activity levels suggest a nearby soprano pipistrelle maternity roost and individual roosts for common pipistrelle, brown long-eared, and Myotis species. **Bat Activity**: The site is important for foraging and commuting bats, particularly near woodland and riparian areas.
Recommendations	**Construction Timing**: Limit works to daylight hours, where possible, to reduce disturbance. **Lighting Strategy**: Implement a lighting strategy in line with Institution of Lighting Professionals (ILP) guidance to minimise light spillage. **Habitat Creation**: Enhance the site with native hedgerows, broadleaved trees, and wildflower and wetland meadows to improve connectivity and foraging opportunities.
Conclusions	Provided the measures within this report for mitigation and enhancement can be adopted, it is anticipated that the plans for the site will allow compliance with legal requirements set out under ecological legislation and national/local planning policy.

1.0 INTRODUCTION

1.1 BACKGROUND

Tetra Tech was commissioned by TNEI on behalf of Field Beauly Ltd (the Applicant) in July 2024 to undertake bat activity surveys to support a planning application for the creation of a Battery Energy Storage System (BESS) and associated development at a site an area of land at Dunballoch Farm near Beauly, in The Highland Council (THC) administrative area, hereafter referred to as "the Site".

This report has been prepared by a Tetra Tech Consultant Ecologist of 'capable' competency for this type of report, as per the CIEEM Competency Framework (CIEEM, 2024), and the conditions pertinent to it are provided in Appendix A.

Bats are protected species, full details of that protection, including types of offences and policy position are provided in Appendix B.

1.2 SITE LOCATION

The site is located approximately 900 m south of Beauly in the Scottish Highlands and is centred at Ordnance Survey National Grid Reference NH 52446 44471 (figure 1). It comprises a large grassland pasture which at the time of the survey was used by grazing sheep. There are two electrical pylons within the field with overhead cables running from east to west. The southeast site boundary is walled by an old dry-stone dyke, behind which is extensive woodland. The wider landscape is largely a mix of pastoral and arable farmland, conifer plantations and areas of mixed woodland. The River Beauly is located west of the site and runs adjacent to the southwest boundary line. Agricultural buildings are adjacent to the site, with the oldest stone structures providing roosting opportunities for a range of bat species.

The wider landscape features woodland and hedgerow habitat within 5 km of the site (which encompasses the core sustenance zones of the majority of UK bat species), including extensive open pastures providing foraging and commuting features. The River Beauly, located west of the site, features riparian edges also providing foraging resources and commuting routes suitable for all bat species relevant to Scotland. There are eleven ancient woodland habitats within 1km of the site, again, providing roost opportunities for a range of bat species.

1.3 DEVELOPMENT PROPOSALS

The development proposals consist of the creation and operation of a Battery Energy Storage System (BESS) of up to 100 MW with associated infrastructure, access, and ancillary works (including landscaping and biodiversity enhancement).

1.4 PURPOSE OF THE REPORT

The purpose of this report is to:

- Identify the species assemblage on site, including the presence of common, rarer or rarest species of bat;

- Categorise the value of the site for bats (as per (Reason & Wray, 2023));
- Understand the spatial and temporal distribution of bat activity across the site;
- Assess the effects of the proposed development of the site relating to bat species; and
- Provide recommendations for mitigation and enhancement where necessary.

The details of this report will remain valid until September 2026 after which the validity of this assessment should be reviewed to determine whether further updates are necessary.

The recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

Note that scientific names are provided at the first mention of each species and common names (where appropriate) are then used throughout the rest of the report for ease of reading.

2.0 METHODOLOGY

2.1 HISTORIC SURVEYS

No previous reports relevant to the site have been identified.

2.2 DESK STUDY

The desktop study comprised two elements:

- A data search obtained from The National Biodiversity Network (NBN) Atlas in July 2024 and Highland Biological Recording Group (HBRG) in September 2024 of records of bats within 2km of the site boundary; and
- Online element including a search using Ordnance Survey (OS) and Aerial Imagery (https://www.bing.com/maps).

2.3 AUTOMATED STATIC MONITORING

In accordance with BCT guidelines (Collins, 2023), two automated bat detectors (Titley Ranger) were deployed at two locations shown in Figure 2. These locations were chosen subjectively according to habitat present, areas to be potentially negatively impacted and to cover potential flightlines around the site.

Details of relevant foraging and commuting habitat in each chosen static location is provided in Table 1 along with the nearest roost location (based on desk study data).

Table 1: Relevant Habitat Information for Each Static Location

Static Location	Phase 1 habitat in location	Linear features within 50m	Nearest Known Roost Location

1	Woodland edge beside traditional stone building	Woodland edge	Brown long-eared roost within 2 km south of the site
2	Field edge near river and woodland/scrub habitats	Tree line, river	

The static detectors were left to record for a minimum of 5 consecutive nights in suitable weather conditions within each of the sampled months (July to October inclusive). Surveys were not contiguous, i.e. they were spaced out to include a reasonable time gap between each monitoring period. The detectors were set to 'Night Only' mode and recorded 30 minutes prior to sunset and finished 30 minutes after sunrise and all calls were recorded in full spectrum. Monitoring dates are provided in Table 2.

Table 2: Monitoring Dates

Monitoring period	Dates
July	30/07/24 – 31/07/24
August period one	01/08/24 – 04/08/24
August period two	08/08/24 – 18/08/24
September	02/09/24 – 10/09/24
October	08/10/24 – 30/10/24

Both static detectors were positioned at approximately 1.5m height and in each case, the omnidirectional microphone of the Ranger was positioned on the side with the microphone facing south. Calls were subsequently analysed using Kaleidoscope Pro software (Version 5.6.8). The monitoring data was processed using the auto-id tool within the software and subsequently all calls not identified as a pipistrelle species or noise file were manually verified. A 10% random sample of the files identified as either pipistrelle species or noise were also manually verified. Data is presented as an activity index of bat passes per night (BPpN - total number of passes in one night) or bat passes per hour (BPpH total bat passes within deployment divided by the total hours the detector was deployed for).

2.4 VALUING BAT POPULATIONS IN A WIDER ECOLOGICAL CONTEXT

The assessment of the value of the bat population on site was based on the method outlined within the UK Bat Mitigation Guidelines (Reason & Wray, 2023). This includes identifying potential regional species assemblage based on known distributions; assessing importance of roosts and foraging & commuting habitats; and finally, looking at overall importance of assemblage. This is broken down into key stages below.

2.4.1 Regional Species Assemblage

British bat species have been subdivided into groups, dependant on how common they are: widespread, widespread in many geographies, but not as abundant in all, rarer or restricted distribution and rarest Annex II species and very rare. Species have been further subdivided based upon the location surveyed. Table 3 presents the rarity categorisation of bats in Scotland (Reason & Wray, 2023).

Table 3: Categorising bats by distribution and rarity in Scotland

Country: Northern Scotland			
[score 4]	**[score 3]**	**[score 2]**	**[score 1]**
Rarest Annex II species and very rare	**Rarer or restricted distribution**	**Widespread in many geographies, but not as abundant in all**	**Widespread**
All other species	Nathusius' pipistrelle *Pipistrellus nathusii*	Daubenton's bat *Myotis daubentoniid* Natterer's bat *Myotis nattereri* Brown long-eared bat *Plecotus auritus*	Common pipistrelle *Pipistrellus pipistrellus* Soprano pipistrelle *Pipistrellus pygmaeus*

2.4.2 Importance of roosts

The Site does not contain any habitat to support roosting bats; however, the immediate surrounding habitats (farm buildings, mature trees) are suitable for roosting bats.

2.4.3 Importance of commuting and foraging

The scale of any changes will determine its likely significance, which cannot be greater than the original value assigned. For example: for a habitat feature assessed as being of District value, the impact significance may be assessed as also being of District value, if the feature will no longer support foraging or commuting activity after development has taken place (i.e. it will be functionally lost). However, where there is a minimal predicted impact on the functionality of the resource, the impact would be less (potentially negligible/limited to the site). The nature of the impacts and their landscape context are both important.

The original value assigned to this site for foraging and commuting features for bats is '**moderate potential value**' as defined in the Bat Survey Guidelines (Collins, 2023). However, it is noted that this assessment applies to habitats on or near to the site as per the guidelines. The majority of the most suitable habitat for foraging bats is located outside of the Site and this should be considered during evaluation.

2.4.4 Importance of assemblage

To assess the importance of bat assemblage, three things need to be determined:

- Species present on site (project data);
- Local species distributions (desk study); and

- Regional species distributions (Table 3).

To determine the maximum possible score any site could achieve, a score is assigned to each species that could be present (as set out in Table 3 and 4), where:

- Widespread in (almost) all geographies [score 1]
- Widespread in many geographies, but not as abundant in all [score 2]
- Rarer or restricted distribution [score 3]
- Rarest Annex II species and very rare [score 4]

Once the score for each has been calculate and summed to determine the maximum theoretical score, the threshold score needed for any assemblage to meet each geographic level of importance can be calculate:

- Assemblage score meets or exceeds 45% of the maximum score: County importance
- Assemblage score meets or exceeds 55% of the maximum score: Regional importance
- Assemblage score meets or exceeds 70% of the maximum score: National importance

Table 4: Scoring system for valuing bat assemblage in Scotland

Rarity category [points/species]		Score
Threshold	Maximum possible	11
County importance threshold: 45%	County	5
Regional importance threshold: 55%	Regional	6
National importance threshold: 70%	National	8

To calculate the maximum possible score for species assemblage, the score is multiplied by no. of species within that category. For example, three widespread species (1 point per species - score 3), five less - abundant species (2 points per species – score 10), three rare species (3 point per species - score 9) producing a maximum total score of 22.

This initial assessment is based on presence only. Factors such as large colonies for a species would increase the importance of any assemblage (up to 'International importance').

2.5 LIMITATIONS

Tetra Tech was commissioned to begin the survey effort in late July; therefore, no survey data was obtained prior to 30th July. The static detector located at the north of the site also failed to record on the first deployment, and so did not collect any data prior to 8th August. The absence of survey data from April to June during the early activity season limits the scope of the data.

Weather data during the static monitoring periods was not recorded, but static detectors were deployed for additional time to compensate for any intermittent adverse weather. The assessment and conclusion of this report will not be impacted by changes in weather throughout the deployment periods.

All survey techniques are subject to bias, and bat detector surveys may under-record species with weak echolocation calls, such as brown long-eared bats. However, these biases were considered when interpreting the results. Some bat calls are variable dependent on the habitats they fly in and on their activity (commuting, foraging, social interaction, etc) and extremely similar between species. In these cases, it is accepted that species are identified to genus level or group level (e.g. *Myotis*, *Myotis/Plecotus* and *Nyctalus/Eptesicus*) (Collins, 2023). Where call parameters are inconclusive the species has been labelled as 'unknown'. This allows the dataset to be interpreted accurately and transparently.

Notwithstanding the limitations highlighted above, the survey effort applied is considered sufficient to meet the aims of the survey and this report, in accordance with the aforementioned guidelines.

The details of this report will remain valid for a period of two years from the date of the survey, after which the validity of this assessment should be reviewed to determine whether further updates are necessary. Note that the recommendations within this report should be reviewed (and reassessed if necessary) should there be any changes to the red line boundary or development proposals which this report was based on.

3.0 BASELINE CONDITIONS

3.1 HISTORIC SURVEYS

No previous reports relevant to the site have been identified.

3.2 DESK STUDY

The NBN Atlas desk study returned recent bat records for species within a 2km radius of the site boundary, of these records, one specified a brown long-eared roost of unknown size, located to the south of the site in 2014, as shown in Table 5.

Highland Biological Recording Group (HBRG) returned one record each of Daubenton's, pipistrelle sp., and soprano pipistrelle.

Table 5: Bat records within 2km radius of the site boundary

Species	Number of records	Latest recorded year
Daubenton's	36	2022
Brown long-eared	1	2014
Pipistrelle spp.	4	2014
Soprano pipistrelle	5	2014
Common pipistrelle	2	2012
Unknown species bat	9	2018

3.3 FIELD SURVEYS

3.3.1 Automated Static Monitoring

The automated bat detectors deployed on site recorded a minimum of four species of bats:

- Common pipistrelle
- Soprano pipistrelle
- Brown long-eared bat
- Myotis sp. (considered to comprise Daubenton's and Natterer's bats)

Static Monitoring Results Summary

A minimum of four species and ~28,000 bat calls were recorded on site across the survey period. Soprano pipistrelle accounted for 74% of calls, common pipistrelle made up 17%, brown long-eared bat 4%, and *Myotis* sp. 4%. Pipistrelle sp. calls (impossible to determine between common and soprano pipistrelle) made up the final 1%.

Static location 2 captured the majority of the activity, recording 63% of all calls throughout the survey period.

August made up 29% of the data collected, with 42% in September, and 27% in October.

A summary of the monitoring results across July to October split by static location and species are displayed in Tables 6 and 7 below as well as shown in Figure 3.

July

During July the species recorded during the static deployment was mostly soprano pipistrelle (~75% of calls) followed by brown long-eared bat (11%). Common pipistrelle and *Myotis* species made up the remaining 8% and 6% of calls. Static location 1 failed to record during this monitoring period.

August

During August the species recorded during the static deployment was mostly soprano pipistrelle (~79% of calls) followed by brown long-eared (9%). *Myotis* species made up 6% of calls, with common pipistrelle and pipistrelle sp. calls making up the remaining 5% and 1%. Static location 2 was the most active area, recording 91% of calls.

September

During September the species recorded during the static deployment was mostly soprano pipistrelle (65% of calls) followed by common pipistrelle (27% of calls). Brown long-eared bat and *Myotis* species made up 3% of calls, with pipistrelle sp. calls making up the remaining 1%. Static location 2 was again the most active, recording 54% of calls.

October

During October the species assemblage was once again predominantly soprano pipistrelle (83% of calls) followed by common pipistrelle (15% of calls). Brown long-eared bat and *Myotis* sp. each made up 1% of calls. For the first time, static location 1 was the most active, recording 55% of calls.

Table 6: Bat passes per hour per species by location and deployment month

Deployment Month	Static Location	PIPPIP	PIPPYG	PIP Sp.*	MYOSPP	PLEAUR
July	**1**	-	-	-	-	-
	2	3	24	0	2	4
August	**1**	2	1	0	0	5
	2	2	42	0	3	2
September	**1**	32	19	0	4	2
	2	1	43	1	0	1
October	**1**	24	80	0	0	0
	2	0	9	0	0	0

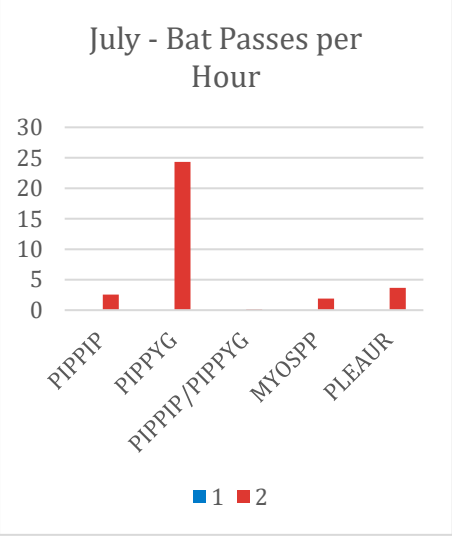
*Key: **PIPPIP**: common pipistrelle, **PIPPYG**: soprano pipistrelle, **MYOSPP**: Myotis species, **PLEAUR**: Brown long-eared, **PIP SP.**: Combinations of pipistrelle species*

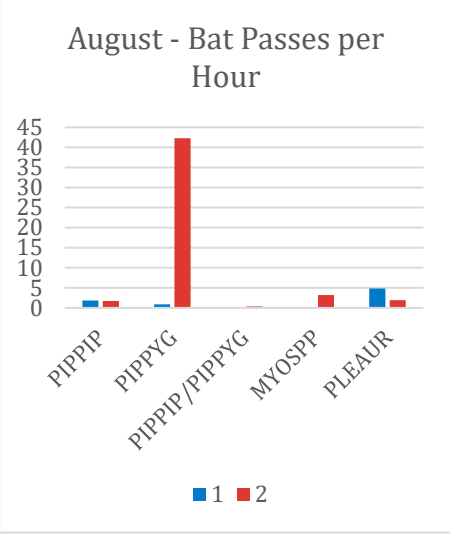
Table 7: Percentages of activity per species by location and deployment month

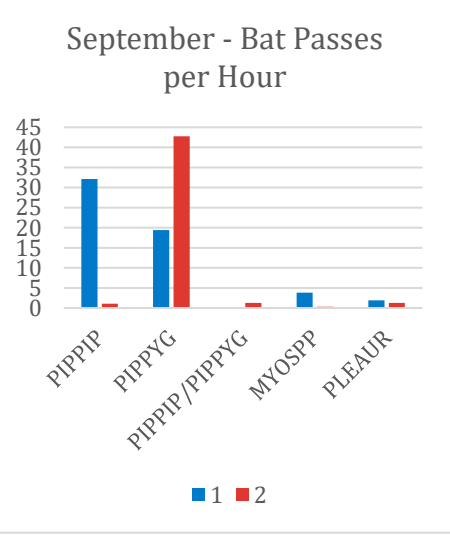
Deployment Month	Static Location	PIPPIP (%)	PIPPYG (%)	PIP Sp.* (%)	MYOSPP (%)	PLEAUR (%)
July	**1**	-	-	-	-	-
	2	8	75	0	6	11
August	**1**	24	12	2	0	62
	2	3	85	1	6	4
September	**1**	56	34	0	7	3
	2	2	92	3	1	3
October	**1**	23	76	0	0	0

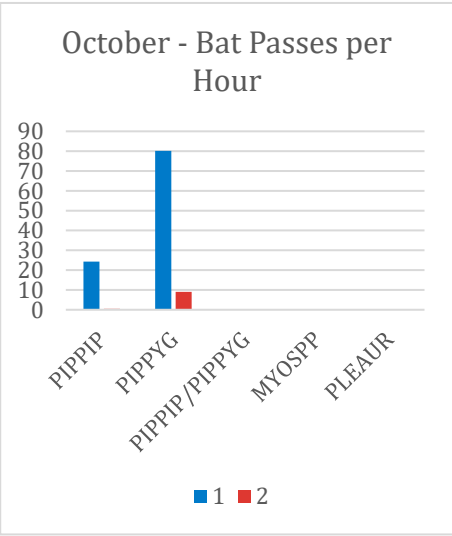
	2	5	90	0	3	2

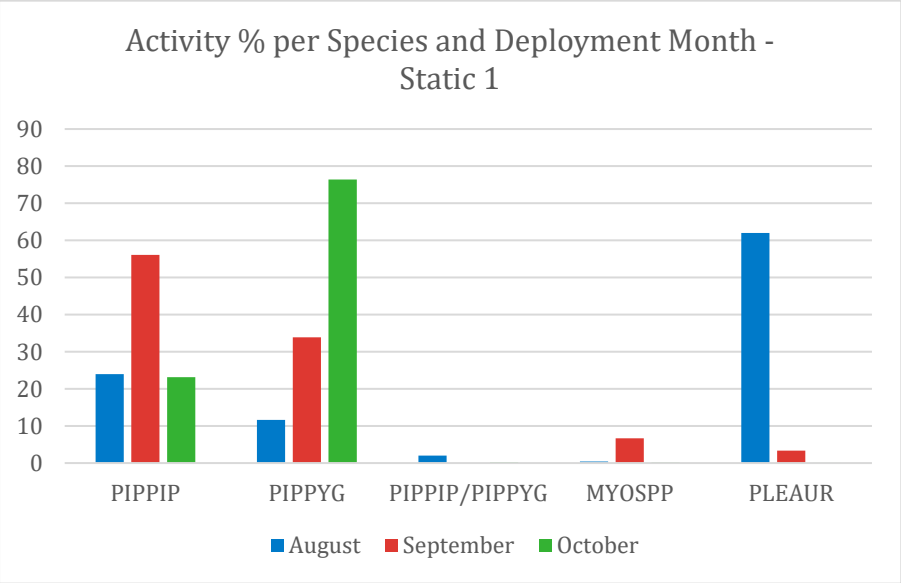
*Key: **PIPPIP**: common pipistrelle, **PIPPYG**: soprano pipistrelle, **MYOSPP**: Myotis species, **PLEAUR**: Brown long-eared, **PIP SP.**: Combinations of pipistrelle species*

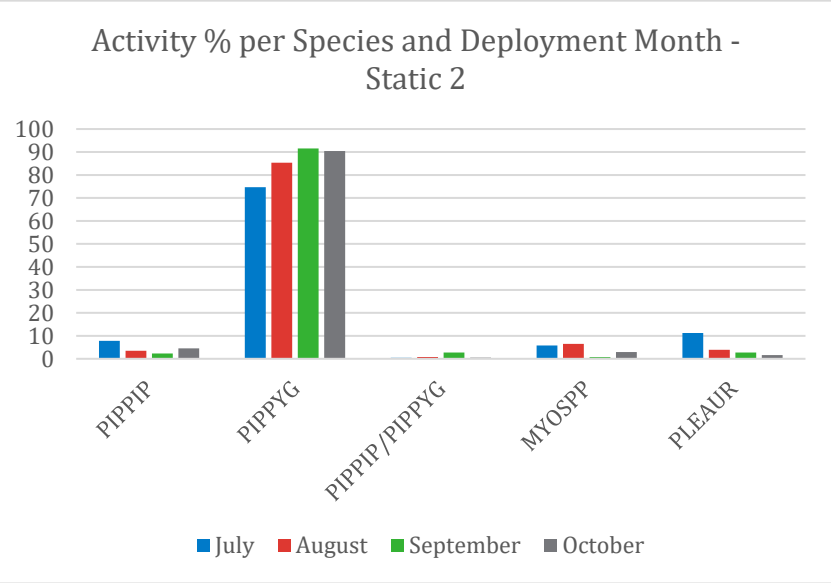

July - Bat Passes per Hour
30
25
20
15
10
5
0
PIPPIP
PIPPYG
PIPPIP/PIPPYG
MYOSPP
PLEAUR
1
2


August - Bat Passes per Hour
45
40
35
30
25
20
15
10
5
0
PIPPIP
PIPPYG
PIPPIP/PIPPYG
MYOSPP
PLEAUR
1
2


September - Bat Passes per Hour
45
40
35
30
25
20
15
10
5
0
PIPPIP
PIPPYG
PIPPIP/PIPPYG
MYOSPP
PLEAUR
1
2


October - Bat Passes per Hour
90
80
70
60
50
40
30
20
10
0
PIPPIP
PIPPYG
PIPPIP/PIPPYG
MYOSPP
PLEAUR
1
2


Activity % per Species and Deployment Month - Static 1
90
80
70
60
50
40
30
20
10
0
PIPPIP
PIPPYG
PIPPIP/PIPPYG
MYOSPP
PLEAUR
August
September
October


Activity % per Species and Deployment Month - Static 2
100
90
80
70
60
50
40
30
20
10
0
PIPPIP
PIPPYG
PIPPIP/PIPPYG
MYOSPP
PLEAUR
July
August
September
October

4.0 DISCUSSION

4.1 VALUATION OF THE BAT POPULATION

The site was found to be of value at a **district** and **regional level** for bats based on the method within the UK Bat Mitigation Guidelines (Reason & Wray, 2023). This assessment is based on the valuations included in Table 8.

Table 8: Valuation of site importance of roosting bats, commuting and foraging habitat, and importance species assemblage

Species (rarity level for Northern Scotland)	Importance of roosts	Importance of commuting and foraging habitat	Importance of assemblage
Widespread Common pipistrelle Soprano pipistrelle	There are no known roosts on site. The desk study identified one brown long-eared roost within 2km south of the site (2015). Brown long-eared bats have been confirmed to be using the site. Given the number and frequency of soprano pipistrelle calls, particularly in the hour around sunset, it is considered likely that a soprano pipistrelle maternity roost is present close to the site. A smaller common pipistrelle maternity roost may also be present in the wider area. The number and frequency of brown long-eared and myotis sp. calls indicates that there may	The habitats in and around the red line boundary meet the definition of 'moderate potential value' as defined in the Bat Survey Guidelines (Collins, 2023). The site itself contains areas of open grassland suitable for foraging and commuting bats, with linear features including tree lines and River Beauly within 50m. • A total of at least four species were recorded on site throughout the survey period. • The highest levels of bat activity were recorded adjacent to the woodland/scrub and River Beauly at the south of the site. Taking the above into account, the habitats within the red line boundary, and particularly the woodland and riparian habitats directly adjacent, the site is to be of **district importance**. Habitats	*1 point per species* Both species have been identified on site therefore the site scores **2**.
Widespread but not as abundant in all geographies Brown long-eared bat Daubenton's bat Natterer's bat			*2 points per species* A minimum of two of the three species have been recorded on site. As *Myotis* species have only been identified to a genus level within the static data analysis, theoretically both myotis species could be present on site within this category. The site therefore scores between **4** and **6**.

Rarer or restricted distribution Nathusius' pipistrelle	be individual bats of these species roosting close to the site, but that this is unlikely to be a significant roost (i.e. maternity). With this in mind the site is deemed to be of **local level** importance.	elsewhere within the county may be of higher value and support a greater diversity and abundance of species.	*3 points per species* No Nathusius' Pipistrelle were recorded on the site. The site therefore scores **0**.

4.2 IMPACTS

Following the desk study and field survey, soprano pipistrelle, common pipistrelle, brown long-eared bat, and *Myotis* sp. are confirmed to be using the Site.

Based on the proposed development plans there may be adverse effects on bats through loss of foraging habitat, and disturbance during the construction and operational phases.

4.2.1 Loss of Habitats

The plan for the site will result in the permanent loss of a relatively small area of grassland and bramble/birch scrub. Due to the abundance of similar and higher value habitats (e.g. woodland, scrub, River Beauly) nearby, this impact is not considered highly significant.

4.2.2 Loss of Connectivity

The plans for the site include the removal of a small area of bramble scrub with immature broadleaved trees along the roadside at the north of the site to facilitate access. Due to the sparse distribution of the trees, and their lack of connectivity with other habitats, this impact is not considered significant. This access will be infilled with native hedgerow following completion of construction works as per development plans.

4.2.3 Construction-phase Disturbance

Noise, vibration, and artificial light at night from construction activities may cause disturbance to bats.

4.2.4 Operational-phase Disturbance

Noise, vibration, and artificial light at night during the operational phase may cause disturbance to bats.

4.3 MITIGATION

As adverse effects on bats are anticipated, mitigation will be required.

The mitigation hierarchy principles are:

- Avoidance – to avoid adverse effects as far as possible by designing out or using preventative measures during the construction process thus resulting in an environmental effect of neutral significance.
- Reduction – to minimise adverse effects as far as possible.
- Compensation – involves measures of the same value to off-set the impact.

4.3.1 Loss of Habitat

An indicative site plan provided by the client includes the planting of native species hedgerows, and the addition of various tree and plant species including a wildflower mix. This is likely to enhance the site for invertebrates, increasing foraging resources for bats and mitigating the loss of a relatively small area of grassland and scrub habitat.

4.3.2 Loss of Connectivity

The indicative site layout plan includes the planting of native hedgerow and broadleaved trees around both the BESS site and the wider ownership boundary. This is likely to improve connectivity across the Site.

4.3.3 Construction-phase disturbance

Where possible, works should take place during daylight hours only. The use of artificial lighting will be temporary, for a duration of 24 months during construction works. The following measures should be taken in line with ILP guidance (Institute of Lighting Professionals (ILP), 2023):

- Lights should be designed to be as low to the ground as possible (specifically not above 8m);
- Directional lighting should be used to avoid light spillage, particularly towards linear features such as tree lines and River Beauly. Hoods/cowls can be used to direct light below the horizontal plane (ideally at an angle less than 70 degrees); and
- Lights should be switched off at night (particularly during the months of April to October inclusive when bats are active), or motion sensors and timers used.

4.3.4 Operational-phase disturbance

As in the construction phase, should artificial lighting be required, a lighting strategy for the site should be designed in agreement with a suitably licenced bat ecologist and line with ILP guidance:

- Lights should be designed to be as low to the ground as possible (specifically not above 8m);
- Directional lighting should be used to avoid light spillage, particularly towards linear features such as tree lines and River Beauly. Hoods/cowls can be used to direct light below the horizontal plane (ideally at an angle less than 70 degrees); and
- Lights should be switched off at night (particularly during the months of April to October inclusive when bats are active), or motion sensors and timers used.

4.4 ENHANCEMENT

It is a requirement of the NPF4 and the Highland Council to provide enhancements for biodiversity as part of development. An indicative site plan provided by the client shows the creation of novel native hedgerow habitat and planting of new broadleaved trees, both which will improve connectivity. Additionally, wildflower and wetland meadow habitat will be created, which can be considered useful for foraging bats.

These habitat enhancements will provide additional foraging and commuting habitat for bats throughout the site.

Additional measures to enhance the site for bats could include the provision of a range of bat boxes within suitable retained trees on site (Schwegler 1FR, 1F, 2FN and 1FF or similar). Lighting should be directed away from these new roost features. Bat boxes should also be located away from footpaths at a height of 4-6 meters and away from walls/fences to remove accessibility to cats.

5.0 CONCLUSION

The findings of this study found that four species of bats are active on site and that the habitats of the riparian zone of the River Beauly provides an important foraging resource in this landscape.

The proposed design, construction and operation of the Beauly BESS project has embedded the suggested mitigation and enhancement measures detailed in this report and thus it is expected that the development will present minimal negative impact on the local bat populations.

Compliant lighting and good practice construction and operation measures to avoid displacement and disturbance of bat activity are to be included in the design which will serve to reduce and avoid direct effect on bats.

Positive effects are expected over the long term for bat foraging and commuting resource resulting from habitat creation, enhancement and management, particularly of the native woodland adjacent to the River Beauly which was found to be in denuded condition as a result of long-term livestock grazing pressure.

In conclusion, with the implementation of the proposed mitigation and enhancement strategies, the Beauly BESS project is not expected to present a risk to roosting, foraging and commuting bats and through Biodiversity Net Gain strategies in the site's landscaping, will assure longevity and an increase in structural diversity of the key resource for bats at this site.

6.0 REFERENCES

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FIGURES

FIGURE 1: SITE LOCATION PLAN

Site Location Plan

Beauly BESS

TNEI on behalf of Field

Legend

Site Boundary

Notes:

Drawn by: AARON.HOWARD

Checked by: Bethany James

Figure No. 1

Revision No. A

12 December 2024

0 50 100 150 200 Meters

Scale 1:4,500 @A3

British National Grid

NGR: 252368E 844418N

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Leeds
United Kingdom
LS1 4ER

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number: 01959704

FIGURE 2: STATIC DETECTOR LOCATIONS

Static Detector Locations

Beauly BESS

TNEI on behalf of Field

Legend

- Site Boundary
- Static Detector Location

Notes:

Drawn by: DYLAN.GUSSMAN

Checked by: Bethany James

Figure No. 2

Revision No. A

13 December 2024

0 30 60 90 120 Meters

Scale 1:3,500 @A3

British National Grid

NGR: 252375E 844430N

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FIGURE 3: STATIC RESULTS

Static Results Plan -July

Beauly BESS

TNEI on behalf of Field

Detector 2

Legend

- Site Boundary
- PIPPIP
- PIPPYG
- PIPPIP/PIPPYG
- MYOSPP
- PLEAUR

Notes:

Drawn by: DYLAN.GUSSMAN

Checked by: Bethany James

Figure No. 3.1

Revision No. A

13 December 2024

0 100 200 300 400 Meters

Scale 1:9,035 @A3

British National Grid

NGR: 252651E 844243N

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Static Results Plan -August

Beauly BESS

TNEI on behalf of Field

Detector 1

Detector 2

Legend

- Site Boundary
- PIPPIP
- PIPPYG
- PIPPIP/PIPPYG
- MYOSPP
- PLEAUR

Notes:

Drawn by: DYLAN.GUSSMAN

Checked by: Bethany James

Figure No. 3.1

Revision No. A

13 December 2024

0 100 200 300 400 Meters

Scale 1:9,035 @A3

British National Grid

NGR: 252651E 844243N

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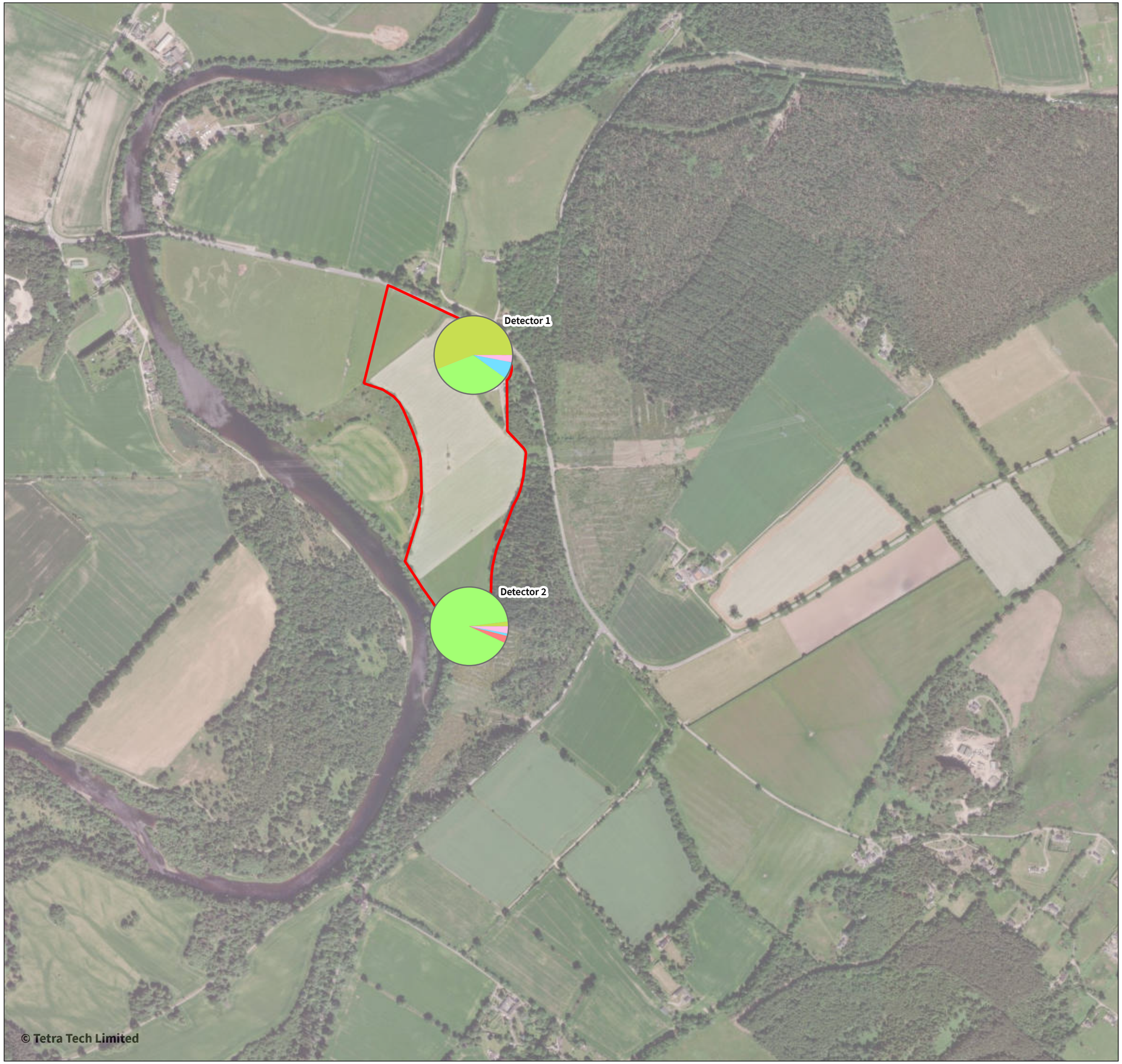

Static Results Plan -September

Beauly BESS

TNEI on behalf of Field

Legend

- Site Boundary
- PIPPIP
- PIPPYG
- PIPPIP/PIPPYG
- MYOSPP
- PLEAUR

Notes:

Drawn by: DYLAN.GUSSMAN

Checked by: Bethany James

Figure No. 3.1

Revision No. A

13 December 2024

0 100 200 300 400 Meters

Scale 1:9,035 @A3

British National Grid

NGR: 252651E 844243N

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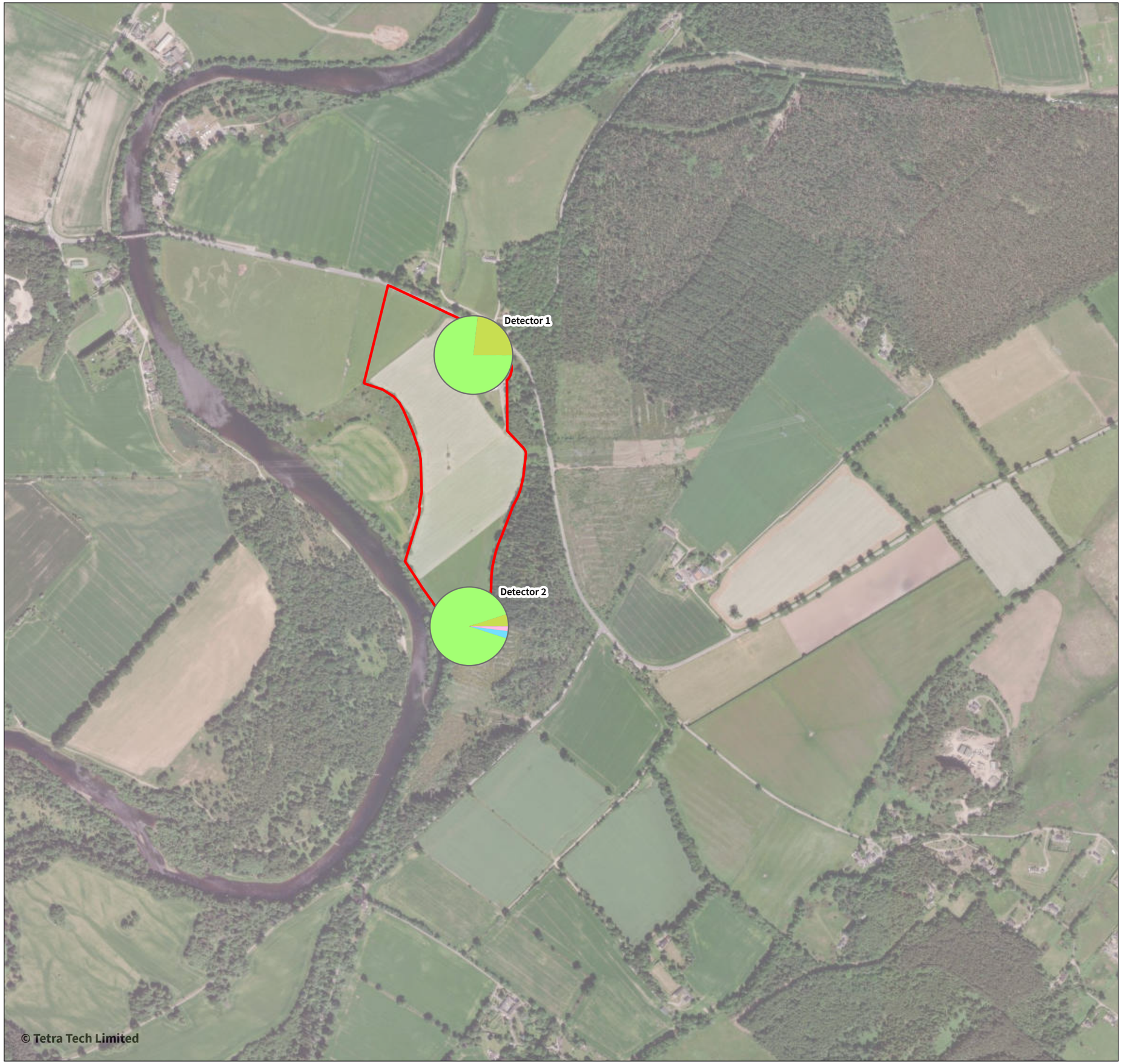

Static Results Plan -October

Beauly BESS

TNEI on behalf of Field

Legend

- Site Boundary
- PIPPIP
- PIPPYG
- PIPPIP/PIPPYG
- MYOSPP
- PLEAUR

Notes:

Drawn by: DYLAN.GUSSMAN

Checked by: Bethany James

Figure No. 3.1

Revision No. A

13 December 2024

0 100 200 300 400 Meters

Scale 1:9,035 @A3

British National Grid

NGR: 252651E 844243N

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APPENDICES

APPENDIX A: REPORT CONDITIONS
APPENDIX B: LEGISLATION AND RELEVANT PLANNING POLICY
APPENDIX C: DETAILED RESULTS OF THE AUTOMATED STATIC MONITORING

APPENDIX A: REPORT CONDITIONS

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The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections'. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B: LEGISLATION AND RELEVANT PLANNING POLICY

The Conservation (Natural Habitats etc.) Regulations 1994

Within Scotland, the primary legislation in relation to Habitats Regulations remains the 1994 statutory instrument.

All species protected under this legislation are European Protected Species and licensing is required for the undertaking of certain activities affecting these species. The protection is applied to all stages of the animals' life.

Under Regulations 39 of the Habitats Regulations, it is unlawful to deliberately or recklessly:

- capture, injure or kill such an animal;
- harass an animal or group of animals;
- disturb an animal while it is occupying a structure or place used for shelter or protection;
- disturb an animal while it is rearing or otherwise caring for its young;
- obstruct access to a breeding site or resting place, or otherwise deny an animal use of a breeding site or resting place;
- disturb an animal in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- disturb an animal in a manner or in circumstances likely to impair its ability to survive, breed or reproduce, or rear or otherwise care for its young; and
- disturb an animal while it is migrating or hibernating.

If impacts to protected species are considered unavoidable then the works may need to be carried out under a site-specific licence from NatureScot. Certain displacement operations may be carried out under a Class licence by a registered person or a site-specific licence.

Species listed on Annex II of the Habitats Regulations are attributed further protection which means that Special Areas of Conservation (SAC) may be designated to internationally important sites for these species.

Wildlife & Countryside Act 1981 (as amended)

This is the principal mechanism for the legislative protection of wildlife in the UK. Since it was first introduced, the Act has been amended several times. All bats are protected through inclusion under Schedule 5 of the Wildlife and Countryside Act 1981 (as amended) and benefit from various levels of protection. This legislation makes it an offence to:

- Intentionally or recklessly kill or injure these animals; and
- Sell, offer for sale, possess or transport for the purpose of sale of publish advertisement to buy or sell individual reptiles.

All are also listed under Schedule 5 Section 9.4b and 9.4c which makes it an offence to:

- Intentionally disturb while occupying a structure or place used for shelter or protection; and
- Obstruct access to such a site.

National Planning Framework

National Planning Framework 4 (NPF4) is the top tier of planning policy. The Framework provides guidance to local authorities and other agencies on planning policy and the operation of the planning system.

"Policy 1 gives significant weight to the nature crisis to ensure that it is recognised as a priority in all plans and decisions. Policy 4 protects and enhances natural heritage, and this is further supported by Policy 5 on soils and Policy 6 on forests, woodland and trees. Policy 20 also promotes the expansion and connectivity of blue and green infrastructure, whilst Policy 10 recognises the particular sensitivities of coastal areas.

Protection of the natural features of brownfield land is also highlighted in Policy 9, and protection of the green belt in Policy 8 will ensure that biodiversity in these locations is conserved and accessible to communities, bringing nature into the design and layout of our cities, towns, streets and spaces in Policy 14.

Most significantly, Policy 3 plays a critical role in ensuring that development will secure positive effects for biodiversity. It rebalances the planning system in favour of conserving, restoring and enhancing biodiversity and promotes investment in nature-based solutions, benefiting people and nature. The policy ensures that Local Development Plans (LDPs) protect, conserve, restore and enhance biodiversity and promote nature recovery and nature restoration. Proposals will be required to contribute to the enhancement of biodiversity, including by restoring degraded habitats and building and strengthening nature networks. Adverse impacts, including cumulative impacts, of development proposals on the natural environment will be minimised through careful planning and design, taking into account the need to reverse biodiversity loss. Development proposals for national, major or Environmental Impact Assessment (EIA) development will only be supported where it can be demonstrated that the proposal will conserve, restore and enhance biodiversity, including nature networks, so they are in a demonstrably better state than without intervention. Proposals for local development will include appropriate measures to conserve, restore and enhance biodiversity."

See here for full details: https://www.gov.scot/publications/national-planning-framework-4/

Local Biodiversity Action Plan (LBAP)

Local Biodiversity Action Plans (LBAP) identify habitat and species conservation priorities at a local level (typically at the County level) and are usually drawn up by a consortium of local Government organisations and conservation charities.

Some LBAPs may also include Habitat Action Plans (HAP) and/or Species Action Plans (SAP), which are used to guide and inform the local decision-making process.

Inner Moray Firth Local Development Plan 2 (The Highland Council, 2024)	
Policy 2 Nature protection, restoration and enhancement	All developments must enhance biodiversity, including, where relevant, restoring degraded habitats and building and strengthening nature networks and the connections between them. Any potential adverse impacts of development proposals on biodiversity, nature networks and the natural environment must be minimised through careful planning and design and following the mitigation hierarchy. Design and layouts must show how they have considered enhancing biodiversity, safeguarding the services that the natural environment provides and building the resilience of nature by enhancing nature networks and maximising the potential for restoration.

APPENDIX C: DETAILED RESULTS OF THE AUTOMATED STATIC MONITORING

Table 9: Total bat passes per species by location and deployment month

Point	Deployment Month	PIPPIP	PIPPYG	PIPPIP/PIPPYG	MYOSPP	PLEAUR	Total
1	July						0
2	July	39	372	2	29	56	498
Subtotal		39	372	2	29	56	498
1	August	177	86	15	3	458	739
2	August	261	6389	58	484	293	7485
Subtotal		438	6475	73	487	751	8224
1	September	3049	1841	0	362	183	5435
2	September	150	5949	176	46	179	6500
Subtotal		3199	7790	176	408	362	11935
1	October	962	3177	11	7	1	4158
2	October	152	3034	16	98	54	3354
Subtotal		1114	6211	27	105	55	7512

Table 10: Bat passes per hour per species by location and deployment month

Point	Deployment Month	PIPPIP	PIPPYG	PIPPIP/PIPPYG	MYOSPP	PLEAUR	Total
1	July						0
2	July	2.55	24.32	0.13	1.90	3.66	32.56
Subtotal		2.55	24.32	0.13	1.90	3.66	32.56
1	August	1.86	0.90	0.16	0.03	4.82	7.77
2	August	1.73	42.30	0.38	3.20	1.94	49.56
Subtotal		3.59	43.21	0.54	3.24	6.76	57.33
1	September	32.15	19.41	0.00	3.82	1.93	57.30
2	September	1.08	42.76	1.27	0.33	1.29	46.72
Subtotal		33.22	62.17	1.27	4.15	3.22	104.03
1	October	24.26	80.13	0.28	0.18	0.03	104.87
2	October	0.45	9.00	0.05	0.29	0.16	9.95
Subtotal		24.71	89.13	0.32	0.47	0.19	114.82