APPENDIX A BAT TECHNICAL APPENDIX

The methodology adopted and the sources of information used by AECOM in providing its services are outlined in this Report. The work described in this Report was undertaken between 15/09/2025 and 26/09/2025 and is based on the conditions encountered and the information available during the said period of time. Additional tree climbing was undertaken by HED between 01/10/25 and 06/10/25 which also informs this Appendix. The scope of this Report and the services are accordingly factually limited by these circumstances. AECOM disclaim any undertaking or obligation to advise any person of any change in any matter affecting the Report, which may come or be brought to AECOM’s attention after the date of the Report.

Scottish & Southern Electricity Networks
TRANSMISSION

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1. INTRODUCTION

1.1 Background

1.1.1 Scottish Hydro Electric Transmission Plc (operating and known as SSEN Transmission) ('the Applicant') submitted a planning application (25/00592/FUL) seeking consent from The Highland Council (THC) for the Bingally 400 / 132 kV Substation project ('the Scheme as Submitted') under the Town and Country Planning (Scotland) Act 1997 (as amended) ('the 1997 Act') in February 2025. A voluntary Environmental Appraisal (EA) was also submitted to support the planning application[1] An Additional Information Report (AIR) has been prepared in response to a number of objections and requests for information by various statutory and non-statutory bodies. The red line boundary of the Scheme as Submitted and the Revised Scheme as presented in **Figure A1 Site Location Plan**, is referred to in this Report as the "Site".

1.2 Purpose of this Appendix

1.2.1 The purpose of this Appendix is to supplement the Additional Information Report in addressing an objection to the planning application received from the THC Ecology Officer who placed "*a holding objection on the application, due to incomplete supporting information with regards to… bat presence / absence".*

1.2.2 Following consideration of the Scheme as Submitted by the Council, a Revised Scheme including an update to the access track alignment has been progressed in response to the RSPB concerns (refer to the AIR at Section 2.7 for reasonings). Therefore, the additional bat survey requirements subject of the THC Ecology officer's objection now relate to part of the original design which is no longer being pursued.

1.2.3 However, in order to understand the impact of the alignment change on any potential bat habitat further survey work was undertaken and is presented in this Appendix. This has been assessed in terms of changes to the conclusions of the EA submitted.

1.2.4 This Report is therefore assessing the impact of the Revised Scheme access track which is shown on **Figure A1 Site Location Plan**.

1.3 Quality assurance

1.3.1 This Report, and the desk study and field survey described within it, has been completed in accordance with the AECOM Integrated Management System (IMS). Our IMS places emphasis on professionalism, technical excellence, quality, as well as covering health, safety, environment and sustainability management. All AECOM staff members are committed to maintaining our accreditation to those parts of BS EN ISO 9001:2015 and 14001:2015, as well as BS OHSAS 18001:2007 that are relevant to a consultancy service.

1.3.2 The bat surveys were led by trained and experienced AECOM / Highland Ecology & Development Ltd (HED) ecologists, all of whom adhered to the CIEEM strict Code of Professional Conduct.

[1] SSEN Transmission (2025) *Bingally Substation EA* [Online]. Available at: https://www.ssen-transmission.co.uk/projects/project-map/bingally-400kv-substation/

2. LEGISLATION

2.1.1 All species of bats found in Scotland are protected under the Conservation (Natural Habitats, &c.) Regulations 1994 (as amended) (more commonly known as the 'Habitats Regulations'). The Habitats Regulations make it an offence to deliberately or recklessly:

- capture, injure or kill a bat;
- harass a bat or group of bats;
- disturb a bat in a roost;
- disturb a bat while it is rearing or otherwise caring for its young;
- obstruct access to a bat roost or otherwise deny a bat use of a roost;
- disturb a bat in a manner or in circumstances likely to significantly affect the local distribution or abundance of the species;
- disturb a bat 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/or,
- disturb a bat while it is migrating or hibernating.

2.1.2 It is also an offence to damage or destroy a breeding or resting place (i.e. a roost) of a bat, whether or not this was done deliberately or recklessly.

2.1.3 A licence must be obtained from NatureScot for any action that could otherwise constitute an offence under the Habitats Regulations. A licence can only be issued for development activities subject to three strict qualifiers being met:

- it must be required for preserving public health or public safety or for some other imperative reasons of overriding public interest, including those of a social or economic nature, and beneficial consequences of primary importance to the environment;
- there must be no satisfactory alternative; and,
- the proposed action must not be detrimental to the maintenance of the species at favourable conservation status.

2.1.4 Under the Nature Conservation (Scotland) Act 2004, public bodies in Scotland have a duty to further the conservation of biodiversity. The Scottish Biodiversity List (SBL) is a list of habitats, plants and animals that Scottish Ministers consider to be of principal importance for biodiversity conservation in Scotland. The purpose of the SBL is to identify habitats and species that are of highest priority for biodiversity conservation, thereby helping public bodies to carry out their biodiversity duty.

2.1.5 The following bat species are identified through their listing on the SBL as being of principal importance for biodiversity conservation in Scotland:

- Brandt's bat Myotis brandtii;
- Daubenton's bat Myotis daubentonii;
- whiskered bat Myotis mystacinus;
- Natterer's bat Myotis nattereri;
- noctule Nyctalus noctula;
- Nathusius' pipistrelle Pipistrellus nathusii;
- common pipistrelle Pipistrellus pipistrellus;
- soprano pipistrelle Pipistrellus pygmaeus; and,
- brown long-eared bat Plecotus auritus.

3. METHODS

3.1 Ground level tree assessment

3.1.1 Ground level tree assessment (GLTA) was carried out on all trees within 30 m of the Revised Scheme access track (herein referred to as the 'Survey Area'). Surveys were completed by experienced AECOM ecologists between 16 and 19 September 2025.

3.1.2 In line with industry standard good practice guidance[2], trees were categorised as: PRF (trees which contain potential roost feature/s); and NONE (no potential roost feature (PRF)[3]. PRFs searched for included suitable holes, cracks or splits in trees. Where such features existed, searches were made as far as possible for evidence of bat use such as droppings, staining, foraging remains, auditory evidence and the presence of live or dead bats. The location of PRFs was recorded on ArcGIS Field Maps along with the following details:

- A description of the tree (e.g. species, maturity, and an estimate of the diameter at breast height (DBH));
- A description of all PRFs identified on the tree (e.g. type of feature, height from ground level, and orientation);
- An initial assessment of potential for further survey (e.g. the feature can be safely inspected from the ground / the tree is suitable for aerial inspection); and,
- Any limitations to the survey.

3.1.3 In accordance with good practice guidance[2], identified PRFs cannot be further categorised based on ground-level assessment only. However, where possible, an initial estimation of the suitability classification was made according to the descriptions provided in **Table 1** below.

Table 1. Categories of potential suitability of PRFs in trees (adapted from Collins, 2023)

Suitability	Description of roosting habitats
PRF-I	Tree has a PRF which is only suitable for individual or very small numbers of bats; either due to their size or lack of suitable surrounding habitat.
PRF-M	Tree has a PRF which is suitable for multiple bats and may be used by a maternity colony.

3.2 Further inspection

3.2.1 On 01 – 06 October 2025, HED conducted aerial inspections of trees with PRFs identified in the previous GLTA, where these could not be surveyed from the ground. Surveyors focussed on trees with PRFs within 30 m of the Revised Scheme access track and associated earthworks. Elevated searches to inspect PRFs were conducted via ladders and specialist climbing equipment by suitably experienced ecologists, working under a NatureScot survey licence. Surveyors assessed the suitability of features to support roosting bats (using the classification system in **Table 1**) and searched for evidence of bat use; this was recorded for each tree.

3.3 Emergence survey

3.3.1 Emergence surveys of three trees with PRFs (trees 6, 8 and 9) were carried out on 25 September 2025, following good practice guidance[2]. The three trees were selected as they were considered unlikely to be safe to climb and they were thought to have potential to

[2] Collins, J. (ed.) (2023). Bat Surveys for Professional Ecologists: Good Practice Guidelines (4th Edition). Bat Conservation Trust, London.

[3] Trees categorised as NONE during GLTA were not digitally mapped.

contain PRF-M features following GLTA (it was subsequently found during further inspections that these trees were not PRF-M, see **Section 4: Results**).

3.3.2 Dusk emergence surveys started 15 minutes before sunset and ended 1.5 hours after sunset. Surveys were undertaken in suitable weather conditions, i.e., no rain or strong wind and with temperatures above 10°C at sunset.

3.3.3 During the emergence surveys, the PRFs were watched carefully by the surveyors and, if bats emerged / re-entered the feature(s), the surveyors noted the location, species (using bat detection equipment, see below) and the number of bats. General bat activity was also noted during the surveys to provide context about the use of the Survey Area by bats.

Plate 1. Indicative IR camera

The surveyors used Elekon Batlogger M2 ('Batlogger') detectors to detect, identify and record bat calls. The detectors were set to record continuously throughout the survey, in real-time (recording calls and gaps, allowing 'rhythms' to be recognised) and in full spectrum (all frequencies), which allows the most comprehensive and detailed analysis. The emergence surveys were supplemented by the use of infra-red (IR) cameras which were paired with each surveyor. The IR cameras recorded continuously throughout the survey, supported by use of an infra-red torch and / or floodlights, which allowed enhanced infra-red visibility. Bats exiting or returning to PRFs, even in darkness, could be viewed in recorded footage. Cameras were focussed on individual PRFs and more widely across the tree being surveyed. After the surveys were complete, the footage was reviewed in full by an experienced ecologist to check for the emergence of bats from PRFs. An indicative camera setup (not from the actual survey) is presented in **Plate 1.**

Sonogram analysis

3.3.4 Analysis of all Batlogger recordings made during the emergence survey was carried out using Kaleidoscope Pro software (Version 5.6.8) by a suitably experienced ecologist, with reference to published guidance[4]. The analysis was audited by an expert bat ecologist to verify identifications.

3.3.5 Analysis of bat call recordings provides information on the species present at each location, as well as the numbers and timing of bat passes. A bat pass is defined as a single automated detector file made up of bat pulses of a single species; this can be one bat in a file or many bats in a file. The number of passes recorded on automated detectors gives an indication of

[4] Wildlife Acoustics (2025) Kaleidoscope User Guide. Available at: https://www.wildlifeacoustics.com/uploads/user-guides/Kaleidoscope03192025.pdf Accessed: 07 October 2025.

the level of bat activity at a given location and can be reliably correlated to bat abundance when considered alongside surveyor observations.

Assessment

3.3.6 Assessment of importance and impacts, and mitigation and compensation requirements presented in **Section 5: Discussion** are made in reference to best practice guidance[2,5].

3.4 Limitations

3.4.1 PRF aerial inspection surveys, as well as providing detailed PRF descriptions, are a preferred method to determine the presence of roosting bats in trees[2] but can be supplemented with emergence surveys where necessary (e.g. where a tree is unsafe to climb or a feature is too fragile to inspect). However, it is recognised that the likelihood of bat presence at the time of survey is low due to roost-switching by bats (roosting in one tree on one night and in another the next) and the evidence of bats quickly decays in PRFs. Therefore, these techniques can provide a low rate of return for roosts found, and whilst good practice guidance[2] states that a full survey of PRF-M trees to determine presence/likely absence require three aerial inspection surveys / emergence surveys spread throughout the bat activity season (April-August / September), a survey result indicating an absence of bats can never be fully confirmed.

3.4.2 Furthermore, the tree climbing and emergence surveys were conducted late in the season (for the geographical location of the Scottish highlands) when maternity roosts are unlikely to be detected, and in many cases, beyond that recommended in good practice guidance[2] (i.e. in the month of October).

3.4.3 The implications of these limitations are described in more detail in **Section 5: Discussion**.

[5] Reason, P.F. and Wray, S. (2025). UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats. Version 1.2. Chartered Institute of Ecology and Environmental Management, Ampfield.

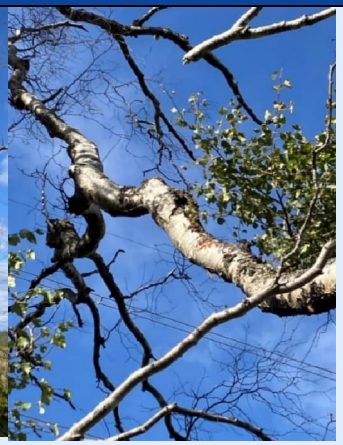
4. RESULTS

4.1 Ground level tree assessment and further inspection

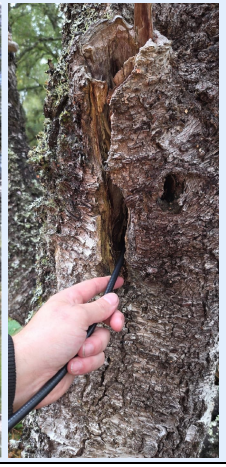
4.1.1 Details of trees with PRFs found within the Survey Area are shown in **Table 2,** this includes: a numbered reference to the tree; descriptions per PRFs; the suitability of a PRF as determined by the GLTA, suitability of a PRF as determined following further inspection; photographs; and, the approximate distance from the Revised Scheme. Locations of trees with PRFs are illustrated in **Figure A2 Ground Level Tree Assessment Results** (as updated by further inspection).

4.1.2 Within the Survey Area, the GLTA survey identified 21 trees with PRFs. Following the further inspection: five trees with PRFs were classified as PRF-M (suitable for supporting multiple bats / maternity roosts), numbered 3, 5, 7, 15 and 19. 10 trees were classified as PRF-I (suitable for an individual bat or a very small number of bats at most), numbered 1, 2, 4, 8, 9, 10, 13, 14, 16, and 21. Six trees were found to offer no features suitable for use by roosting bats, numbered 6, 11, 12, 17, 18 and 20.

Table 2 - Trees with the potential to support roosting bats identifies during field surveys

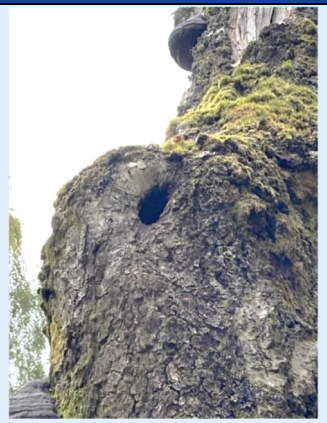
Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
1	A mature silver birch on the bank of a watercourse with a DBH of 50 cm.	A	Damage is present at 6 m on the south-east side of a north-west-pointing limb offering a shallow and exposed feature only.	PRF (I)	PRF-I	 	Within the track and associated earthworks footprint.
		B	A hollow pruning cut facing south on a south-pointing branch at 10 m provides a 10 cm deep dry cavity.				
		C	Lifted bark roughly 2.5 m off the ground on the east face of the trunk unsuitable as a PRF.				

[6] indicative classification is shown in brackets.

Reference	Tree Description	PRF Description(s)	Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
2	A mature birch with a DBH of approximately 80 cm.	Small cracks and shallow decay features around main trunk and throughout canopy on old tree.	PRF (I)	PRF-I	 	26 m
3	A mature silver birch with partially fallen limbs, with a combined DBH of 70 cm.	Damage at 1.5 m on the northern limb's east-north-east face from a prior lost branch, reveals cluttered splintered bark and leads to a 20 cm deep dry, sheltered cavity up into decayed stem.	PRF (M)	PRF-M	 	Within the track and associated earthworks footprint.

Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
4	A dead standing birch stump with a DBH of approximately 60 cm.	A very rotten, crumby old stump that is falling apart with some minor unstable rot holes and flaking bark features.		PRF (I)	PRF-I	 	Within the track and associated earthworks footprint.
5	A mature silver birch with a DBH of 45 cm.	A	A tear-out on the east side of a southern limb at 4 m with a visible crack through to the opposite (west) side contains a 10 cm deep upward facing decay pocket.	PRF (M)	PRF M	 	12 m

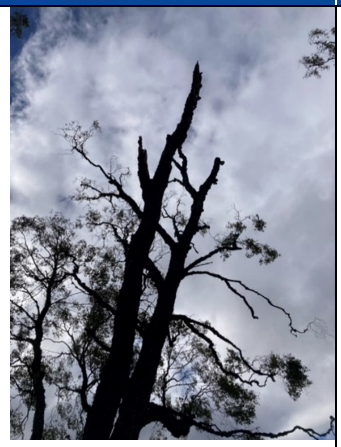
Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
6	A mature silver birch near the base of a cliff slope, with a DBH of 40 cm.	Lifted bark is visible just below a protruding branch on the south-south-east face at 15 m, offers only a shallow and unsuitable cavity.		PRF	NONE	 	Within the track and associated earthworks footprint.
7	A dead standing birch stump with a DBH of approximately 60cm.	A	Large rot hole into decayed main stem on east face, 10-20 cm deep, dry and sheltered.	PRF (M)	PRF-M	 	3 m
		B	Decayed and crumbly top of stump with exposed shallow features.				
8	A dead standing mature birch with a DBH of	A	A knothole at 2.5 m on the south face extends straight	PRF (M)	PRF-I		16 m

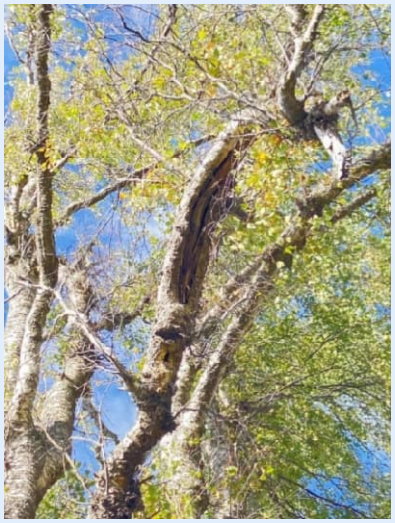
Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
	approximately 40 cm.		through trunk and is damp.			 	
		B	Shallow holes and cracks around stump top.				
		B	Decayed and crumbly top of stump with exposed shallow features.				
9	A standing dead birch.	Five woodpecker holes are present on the south-south-east side of the trunk between 7–10 m; all are 4-10 cm deep but a bit exposed and fragile with decay.		PRF	PRF-I	 	4 m

Reference	Tree Description	PRF Description(s)	Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
10	A mature silver birch with minor fire damage at the base and a DBH of 60 cm.	A crack on the east face of the trunk at 9 m contains lifted bark, forming a narrow space that is shallow and exposed; 5 cm deep.	PRF (I)	PRF-I	 	5 m
11	A mature birch with a DBH of approximately 40 cm.	A north-facing knothole at 7 m is shallow and unsuitable.	PRF (I)	NONE	 	24 m
12	A standing deadwood tree, 4 m tall, with a DBH of 50 cm.	Some rot and damage are visible at the top of the stump on the south-east side; woodpecker holes and decay pockets around higher section of stump are shallow, exposed and	PRF (I)	NONE		11 m

Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
		are not suitable for roosting bats.					
13	A semi-mature silver birch located on a slope, with a DBH of 25 cm.	A	A tear-out on the north-west limb at 7 m, facing north-east, provides an 8 cm deep semi-sheltered cavity.	PRF	PRF-I	 	Within the track and associated earthworks footprint.
		B	A knothole at 5 m on the northwest face has no suitable cavity.				
		B	Lifted bark and decayed wood on the west-north-west face of the south-west trunk near the top conceals a small, shallow, and exposed cavity beneath.				
14	A dead standing birch stump with a base diameter of	A	A large, sheltered woodpecker hole at 4 m on the north-east face is 20 cm deep.	PRF (M)	PRF-I		Within the track and associated earthworks footprint.

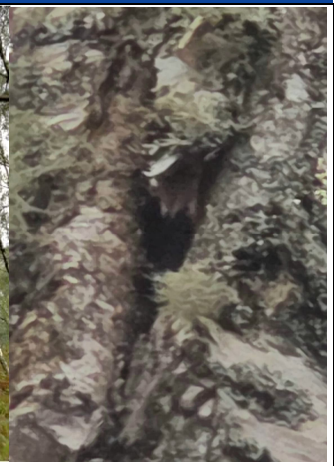
Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
	approximately 50 cm.	B	Woodpecker hole into 10 cm deep cavity.			 	
		C	Large deep flaking bark features that are falling apart. The whole stump is decayed and unstable.				

Reference	Tree Description	PRF Description(s)	Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
15	A mature silver birch with a DBH of approximately 60 cm.	Multiple woodpecker holes and rot-pockets on large dead stem that are 8-12 cm deep, dry and sheltered.	PRF (I)	PRF-M	 	Within the track and associated earthworks footprint.

Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
16	Two adjacent dead standing trees, approximately 8 m and 11 m tall, located near converging streams on a slope.	A	An exposed woodpecker hole on the east-south-east side of the north-east trunk.	PRF (I)	PRF-I	 	Within the track and associated earthworks footprint.
		B	Lifted bark and decayed wood on the west-north-west face of the south-west trunk near the top conceals a small, shallow, and exposed cavity beneath.				
17	A mature silver birch situated at the top of a slope, with a DBH of 40 cm.	Cracking is present on the underside of a south-east pointing branch at 5 m is too exposed and has no suitable roosting features at present.		PRF (I)	NONE		3 m

Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
18	A standing deadwood tree hosting numerous mushrooms along its trunk.	A	A hollow pruning cut is located on the north-east face of the south-east limb at 6 m, appearing to extend downwards, and is unsuitable.	PRF	NONE		22 m
		B	An upward-facing tear-out on the northwest limb at 10 m is unsuitable.				
		C	Extensive damage and rotting heartwood on the west face of a south facing branch with no suitable features.				

Reference	Tree Description	PRF Description(s)		Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
19	An extremely damaged mature birch with a DBH of approximately 80 cm; appears dead, though minimal growth remains on a low branch.	Extensive damage is present on all sides including an old tear out wound on west side at 50 cm to 2.5 m with wide opening extends into a 40 cm deep, dry, upward rot pocket. Also, multiple large flaking bark features and a 30 cm deep crack on south site at 6 m which is damp and decayed inside.		PRF (M)	PRF-M		2 m
20	A mature birch growing on the mid-slope, with a combined DBH of 65 cm.	A	A hollow pruning cut is visible on the west-north-west face of the south limb at 2 m but is shallow, exposed, and unsuitable for roosting bats.	PRF	NONE		23 m
		B	A tear-out on the north aspect of the south limb at 4 m is shallow, exposed and unsuitable for roosting bats.				

Reference	Tree Description	PRF Description(s)	Suitability (GLTA)6	Suitability (further inspection)	Photos	Approximate distance from Revised Scheme access track
21	A semi-mature silver birch with a DBH of 25 cm, situated on a slope.	A crack on the north-north-west side of the trunk at 5 m has small upward facing rot pocket that is 6 cm deep.	PRF (I)	PRF-I	 	17 m

4.2 Emergence surveys

4.2.1 Trees 24, 27 and 28 (classified following further inspection as PRF-I, PRF-I and NONE, respectively) were subject to a single emergence survey to check for roosting bats. The sunset time was 19:11. The survey start / end time was 18:56 to 20:31. The weather was calm with no precipitation, clouds or wind, consistent throughout the entire survey. Temperatures were around 12°C at the start of the survey, and 8°C at the end.

4.2.2 The survey, and subsequent review of the infra-red camera footage, revealed that **no bats emerged from any of the trees surveyed**.

4.2.3 Analysis of the collected Batlogger data identified three species of bat that were active across the surveyed trees, these were common pipistrelle *Pipistrellus pipistrellus*, soprano pipistrelle *Pipistrellus pygmaeus* and, rare in occurrence, brown long-eared bat *Plecotus auritus*. The results of the surveys are summarised below in **Table 3**. The early activity recorded during surveys (before sunset) indicates that bats were likely to have emerged from roosts nearby.

Table 3. Results of emergence surveys for trees 6, 8 and 9.

Tree	Species	Number of passes		First – Last recording
6	Common pipistrelle	132	Total: 175	19:07 – 20:38
	Soprano pipistrelle	32		
	Brown long-eared bat	1		
8	Common pipistrelle	58	Total: 166	19:11 – 20:38
	Soprano pipistrelle	78		
	Brown long-eared bat	1		
9	Common pipistrelle	84	Total: 162	19:00 – 20:38
	Soprano pipistrelle	72		

4.2.4 A snapshot of the darkest point of the night captured on IR cameras during emergence surveys of each survey is provided below.

6

8 (SE aspect)

8 (NW aspect)

9

5. DISCUSSION

5.1 Impacts on bats

5.1.1 Owing to changes in the ecological baseline compared to the EA (**Volume 1, Chapter 8, Section 8.5.59**), the impact assessment for roosting bats has been reconsidered. This assessment of impacts and effects was conducted in accordance with the guidelines published by CIEEM[7] and followed the methodology described in the EA (**Volume 1, Chapter 8, Sections 8.3.22-8.3.26)**. Effects predicted to be significant at the Regional or greater geographic level are considered to be Significant in broader EA terms, whereas those predicted to be significant only at the Local, Site, or Negligible levels, are considered to be Not Significant.

5.1.2 The EA found that there will be Negligible effect on roosting bats from disturbance by vehicular traffic and No effect on roosting bats from disturbance by artificial lighting (**Volume 1, Chapter 8, Sections 8.7.64 and 8.7.65**). The justification provided in the EA remains valid and there will be Negligible / No effect on roosting bats from the impact of the Revised Scheme.

5.1.3 Given the size of the trees present (birch trees with DBH of up to approximately 80 cm), a 10 m root protection area (RPA) is likely to be sufficient to prevent root damage (and therefore protect any potential bat roost from direct disturbance). However, when considering the impact of the Revised Scheme on roosting bats, a conservative approach has been adopted, hence PRFs on all trees within 15 m[8] of the Revised Scheme access track and related earthworks are taken to be lost as a result of the Revised Scheme.

5.1.4 Using this conservative approach, up to five PRF-M features and nine PRF-I features could be lost as a result of the Revised Scheme (compared to one PRF-M and one PRF-I assessed in the EA). As discussed in **Section 3.4: Limitations**, one aerial inspection of PRF-M trees was undertaken towards the end of the bat activity season when maternity colonies have most likely dispersed when industry standard guidance recommends that three surveys are carried out across the bat activity period[9] Therefore, it cannot be concluded that the absence of bats recorded during field survey means the features are not used at other times of the year. Therefore, the impact assessment here has been undertaken on a precautionary basis, that is, these features have not been discounted as PRFs and will be subject to the mitigation and compensation measures proposed within **Section 5.2**below.

5.1.5 Due to the geographical location of the Revised Scheme in the Scottish Highlands**,** PRFs are most likely to be used by common and widespread species (e.g. soprano pipistrelles or brown long-eared bats); which is supported by the results of the emergence surveys. However, it is possible—considering the range of other species in Scotland—that less common species are present locally (e.g. Natterer's bat or Nathusius' pipistrelle). The assessment of impacts on roosting bats is carried out on a precautionary basis assuming four PRF-M features support maternity colonies of common and widespread species and one maternity colony of a locally uncommon species. Subsequently, the importance of the Site for roosting bats is assessed as being of Local importance.

5.1.6 When assessing the loss of one PRF-M and one PRF-I tree, the EA concluded that "*there will be a Negligible effect from the direct loss of or damage to bat roost sites*" (**Volume 1,**

[8] where features are recorded as being within 18 m, they are included in the assessment on a precautionary basis due to inaccuracies in GPS data. Two trees (8 and 21) were included on this basis. Distances from works will be accurately measured on-site to inform mitigation and compensation.

9 CIEEM (2022). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine (Version 1.2, updated April 2022). Chartered Institute of Ecology and Environmental Management, Winchester.

Chapter 8, Section 8.7.63). The updated ecological baseline means there is now an increase in the magnitude of effect (i.e. increased number of potential roosts lost compared to the EA). However, the mitigation and compensation proposed below in **Section 5.2**—which is based on a practicable worst-case baseline—is sufficient to ensure there is a net gain in roost resource within the Site. There may be a delay in bats locating and using the compensatory bat roost features after losing the assumed confirmed roost sites, although these species are likely to have multiple roost sites within their core sustenance zones.

5.1.7 Therefore, following implementation of mitigation and compensation measures, there will be a **Temporary Adverse effect of no more than Site importance** from the direct loss of or damage to bat roost sites which, whilst slightly increased from the assessment in the EA, remains **Not Significant**.

5.2 Mitigation and compensation

5.2.1 Based on the pre-cautionary principle set out above, the following actions are proposed to compensate for the loss of potential bat roosts as a result of the Revised Scheme and would be captured in a bat Species Protection Plan:

- Works would be supervised by a suitably experienced ecologist;
- Any trees with PRFs within 15 m of construction works would be inspected for the presence of bats on the same day prior to works taking place. If a bat is found the PRF is a confirmed roost and works would be stopped and advice sought from the suitably experienced ecologist; and
- Compensation would be made for the reduction in roost resource by a like-for-like or better replacement of bat roost features. This would be through translocation / recycling of PRFs (where suitable) or by the installation of artificial bat boxes (we recommend a ratio of one bat box per PRF-I and two per PRF-M).

5.2.2 As detailed in **Section 2** above, a licence must be obtained from NatureScot for any action that could otherwise constitute an offence under the Habitats Regulations (i.e. where works directly disturb—are within 15 m of—a confirmed roost). In line with industry standard guidance[2], if any confirmed roost is identified and it is a PRF-M, further survey would be required to inform the licence application to NatureScot and ensure legal compliance. In this instance, survey would likely comprise two additional aerial inspections between May and August, inclusive, prior to construction, but will be informed by a suitably experienced ecologist as necessary (e.g. if a maternity colony were to be identified during a second survey, the requirement for and approach to a third survey may be altered).

6. SUMMARY

6.1.1 The proposed Bingally 400 / 132 kV Substation access track design has been updated from that submitted as part of the original application in response to the RSPB concerns. To understand the impact of the alignment change on any potential bat habitat, further survey work was undertaken. This Appendix supplements the Additional Information Report and includes:

- The results of further bat survey work conducted;
- An updated assessment of the impacts to roosting bats as a result of the Revised Scheme
- Outlined mitigation and compensation measures, and
- A commitment to producing a site-specific bat Species Protection Plan.

6.1.2 Trees with potential to support roosting bats were identified that would be impacted by the Revised Scheme: five were classified as PRF-M and nine as PRF-I trees. No bat roosts were confirmed during the surveys. The following species were confirmed as present in the area: common pipistrelle; soprano pipistrelle; and brown long-eared bats.

6.1.3 All works would be supervised by a suitably experienced ecologist with comprehensive understanding of bats and mitigation measures, and under licence obtained from NatureScot where necessary. Works within 15 m of trees with PRFs would be preceded by same-day inspections. To mitigate impacts, PRFs would be replaced on a like-for-like (or greater) basis through the use of translation and / or the installation of suitable bat boxes.

6.1.4 Limitations to surveys have been acknowledged and a precautionary approach has been applied to the impact assessment, mitigation, and compensation proposals presented within this Appendix. It is not considered the mitigation and compensation proposals would differ, even had the presence of bats at PRFs been confirmed. As noted within Section 5.2, additional surveys would be undertaken, if required, as part of the licencing process. It is considered therefore that this Appendix has presented sufficient detail to allow THC to appropriately progress the determination of the planning application.

APPENDIX A FIGURES

Scottish & Southern Electricity Networks
TRANSMISSION

29 30 31 32

26 25 24 23

Legend

- Proposed Development Site

Permanent Layout

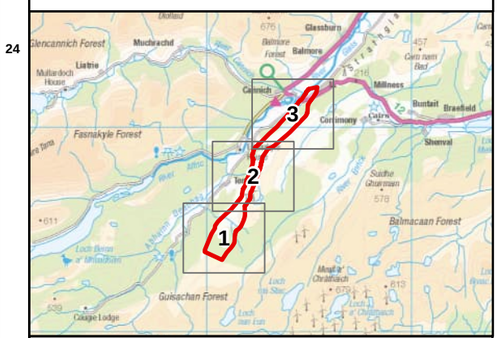
- Substation Platform
- Substation Platform Earthworks
- Peat Cell Storage Area
- Access Track
- Access Track Earthworks
- Permanent SUDs Basin
- Borrow Pit
- External Peat Cell
- Peat Cell

Temporary Layout

- Temporary Drainage
- Temporary Settlement Lagoon
- Platform Peat Cell Ramp Earthworks
- Platform Peat Cell Ramp Track
- Temporary Platform Compound 1
- Temporary Platform Compound 1 Earthworks
- Temporary Platform Compound 2
- Temporary Platform Compound 2 Earthworks

Scale @ A3: 1:12,500

0 250 500 1,000 1,500 2,000 2,500 m



Project No: LT000521

Project: Bingally 400kV Substation Upgrade

Title:
Site Location Plan

Drawn by: FMOHUN Date: 16/10/2025

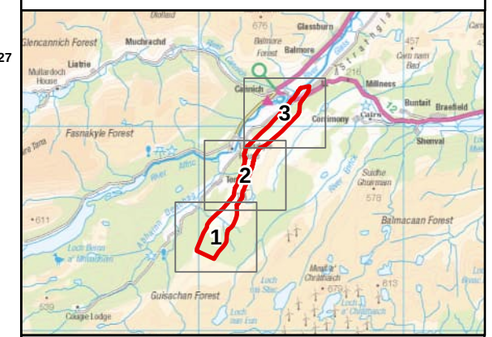
Drawing: Figure A1

Legend

- Proposed Development Site

Permanent Layout

- Access Track
- Access Track Earthworks
- Borrow Pit



Project No: LT000521

Project: Bingally 400kV Substation Upgrade

Title:
Site Location Plan

Drawn by: FMOHUN Date: 16/10/2025

Drawing: Figure 1

Scottish & Southern Electricity Networks
TRANSMISSION

33 34 35 36

32 31 30 29

Scale @ A3: 1:12,500

0 250 500 1,000 1,500 2,000 2,500 m

Legend

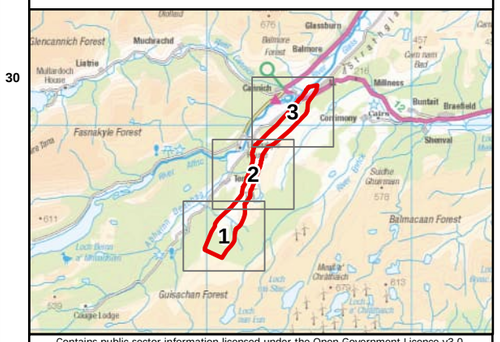
- Proposed Development Site
- Survey Area

Permanent Layout

- Access Track
- Access Track Earthworks
- Borrow Pit

Temporary Layout

- Temporary Compound 5
- Temporary Compound 5 Access Track
- Temporary Compound 5 Access Track Earthworks
- Temporary Compound 5 Earthworks



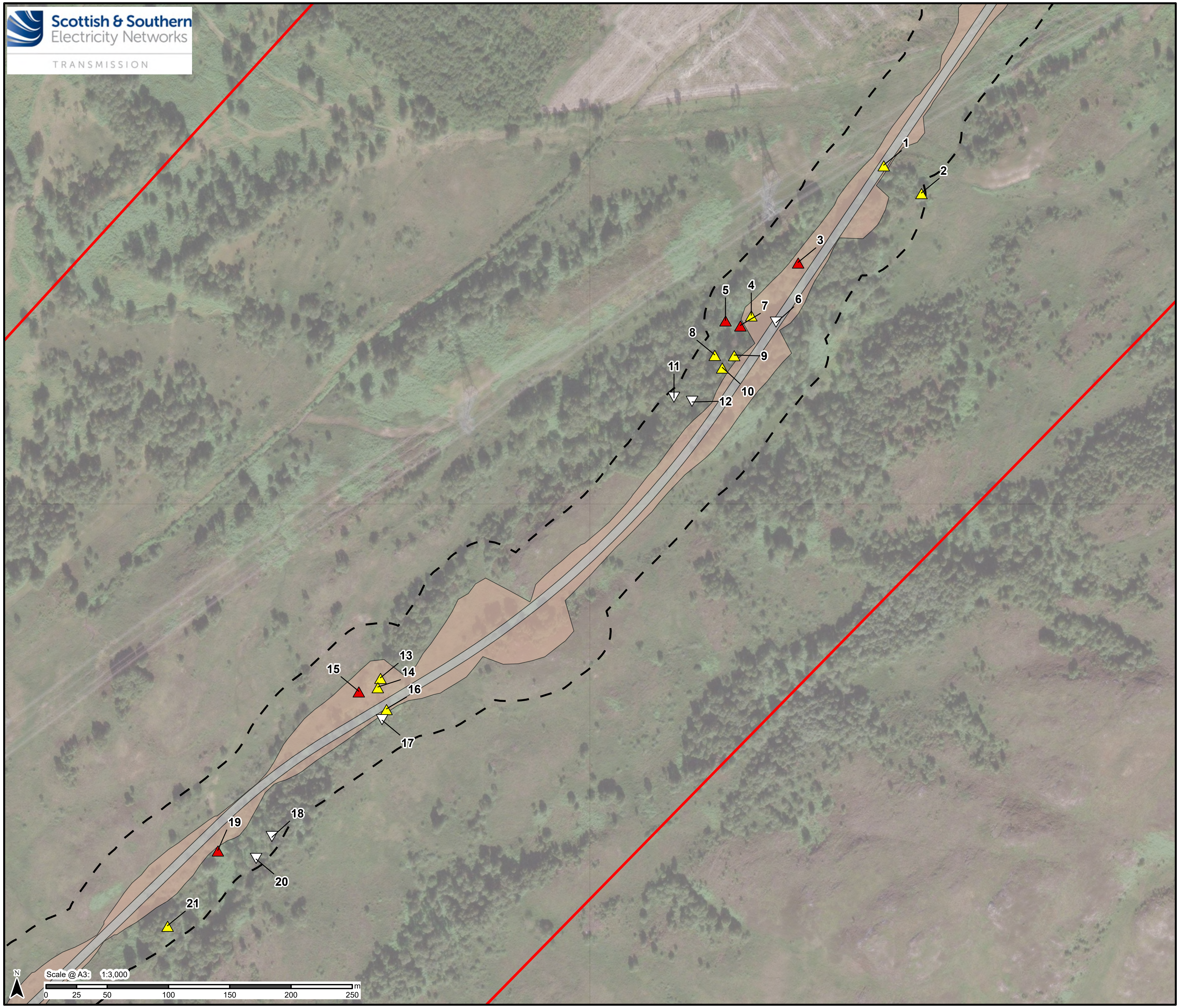
Project No: LT000521

Project: Bingally 400kV Substation Upgrade

Title:
Site Location Plan

Drawn by: FMOHUN Date: 16/10/2025

Drawing: Figure 1



Legend

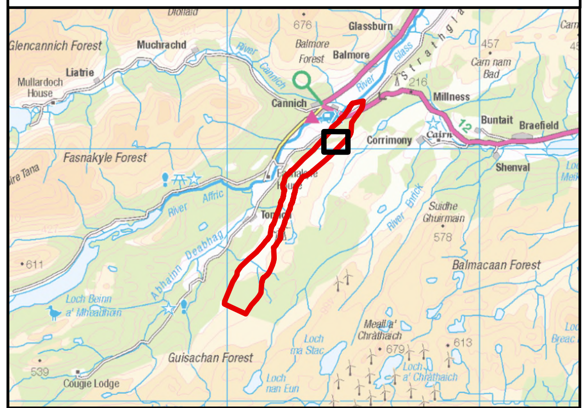
- Proposed Development Site
- SSEN Alternative Access Track - 30m Buffer

Permanent Layout

- Access Track
- Access Track Earthworks

Ground Level Tree Assessment Results (Post Climb)

- PRF-M
- PRF-I
- NONE



Project No: LT000521

Project: Bingally 400kV Substation Upgrade

Title:

Bat Ground Level Tree Assessment Survey Results

Drawn by: FMOHUN

Date: 31/10/2025

Drawing: Figure 2