Preliminary Environmental Information Report Volume 2

Appendix 8.10 Baseline Report - Bat Activity Survey

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Contents

1 Introduction

1.1 Project description

1.1.1 LionLink is a proposed electricity interconnector between Great Britain and the Netherlands that would supply up to 2 gigawatts (GW) of electricity and would connect to Dutch offshore wind via an offshore converter platform in Dutch waters (hereafter the Project).

1.1.2 The Proposed Scheme (defined as the part of the Project within the British jurisdiction) would involve the construction of the proposed Converter Station and the installation of offshore and onshore proposed Underground High Voltage Direct Current Cables (HVDC) to the proposed Converter Station and the proposed Underground High Voltage Alternating Current Cables (HVAC) between the proposed Converter Station and the Kiln Lane Substation.

1.2 Overview of survey approach

1.2.1 An Ecology Survey Strategy (ESS) was produced in March 2023, which explained the approach for ecological survey to inform the baseline for the Proposed Onshore Scheme. The ESS set out the rationale and methods for how and when relevant ecological features would be identified to inform the design process. The aim of the ESS was to ensure that sufficient baseline data would be available to embed the mitigation hierarchy within the design, i.e. to avoid adverse impacts to valuable ecological features wherever possible, and to minimise any unavoidable adverse impacts.

1.2.2 Initial baseline ecological surveys commenced in 2023 on the basis of the Proposed Onshore Scheme Scoping Boundary (shown in Figure 1-2 of the EIA Scoping Report (Ref 1)), which included the proposed Landfall Site at Walberswick and the Landfall Site at Southwold. Subsequently, the Draft Order Limits (DOL) has been fixed in late 2024, reflecting design development and representing a substantial reduction on the Proposed Onshore Scheme Scoping Boundary, including the discounting of the Landfall Site at Southwold and the associated proposed Underground Cable Corridor (refer to **Chapter 3 Alternatives and Design Evolution**).

1.2.3 The initial stage of the ESS was to undertake Preliminary Ecological Appraisal (PEA) of all accessible areas within the Proposed Onshore Scheme Scoping Boundary, comprising a desk study for existing biological records and a field survey. PEA of most of the boundary was completed in 2023, with additional PEA surveys in 2024 to fill data gaps for previously inaccessible land. PEA field survey comprised:

a. mapping of the habitat types present following a published and recognised habitat classification that is appropriate for the site's location;

b. scoring the condition of habitat types present in accordance with Defra Metric criteria to inform BNG assessment;
c. an assessment of the possible presence of protected or priority species, and (where relevant) an assessment of the likely importance of habitat features present for such species;
d. mapping of any stands of non-native invasive plant species; and
e. recording of any incidental sightings of priority or protected species, or field signs of such species.

1.2.4 In relation to bat activity, the habitat assessment/mapping recorded during the PEA was used to identify habitats of highest suitability for bats which may support the local bat assemblage through the provision of foraging and commuting opportunities.

1.2.5 Siting and routeing appraisals and other design development work was progressed in parallel with the PEA surveys in 2023, guided by emerging survey results. This design work refined the likely boundaries of the proposed Landfall Site, the proposed Underground HVDC and HVAC Cable Corridors and associated temporary works.

1.2.6 The scope of the bat activity surveys covered by this report comprise:

a. Habitats and landscape features of potential value for bats that fall within and adjacent to the proposed Landfall Site at Walberswick, the discounted Landfall Site at Southwold and the proposed Converter Station Site to the east of Saxmundham.
b. Sampling of high suitability habitats and features within the wider Proposed Onshore Scheme Scoping Boundary to identify the local bat assemblage, inform the design of further bat survey work and provide context to survey findings.

1.3 Purpose and scope of this document

1.3.1 The purpose of this report is to present the results of the bat activity surveys undertaken for the Proposed Onshore Scheme. The objectives of this report are to:

a. undertake a review of bat records within 2km of the Proposed Onshore Scheme;
b. undertake a search for relevant statutory and non-statutory sites, ancient woodland and notable/veteran trees for bats;
c. undertake a review of bat mitigation licences issued for sites within 2km of the Proposed Onshore Scheme;
d. assess the bat assemblage and relative bat activity levels within and adjacent to the Proposed Onshore Scheme;
e. provide sufficient information to inform an assessment of the potential impacts to the bat assemblage as a result of the Proposed Onshore Scheme when combined with the wider suite of bat surveys.

1.4 Legislation

1.4.1 A framework of international, national and local legislation and planning policy guidance exists to protect and conserve wildlife and habitats and is set out within **Chapter 4 Legislation and Policy Overview** and **Appendix 4.1 Legislation and Policy Register**.

1.4.2 Legislation relevant to and discussed within this report includes the following:

a. The Conservation of Habitats and Species Regulations 2017 (Ref 2).
b. Wildlife and Countryside Act 1981 (Ref 3).
c. Natural Environment and Rural Communities (NERC) Act 2006 (Ref 4).

1.4.3 All native bat species and the sites that they use for breeding or resting are afforded protection through the provisions within Schedule 5 of the Wildlife and Countryside Act 1981 and Schedule 2 of the Conservation of Habitats and Species Regulations 2017. It is therefore an offence, without a licence from Natural England, to intentionally or recklessly kill or injure bats; to disturb, obstruct, damage or destroy their roosts (including when those roosts are empty) or to take, possess or trade in bats and their parts (alive or dead).

1.5 Status of bats at national level

1.5.1 There are 17 species of bat that are known to breed in the UK. Bat populations are known to have decreased significantly over the last century, with this largely attributed to threats associated with development. These threats include direct impacts on roosts from building and development work requiring tree removal and the demolition of buildings and other structures, in addition to severance of important commuting corridors by roads, other linear infrastructure and vegetation removal.

1.5.2 Habitat loss has also resulted in the loss and degradation of important foraging areas for bat populations. Increased disturbance from light and noise associated with development both through construction and operation, and the installation of wind turbines are also thought to have contributed to the decline in the numbers of bats.

1.5.3 Species of principal importance (SPI) for the purpose of conserving biodiversity in England are listed under the provisions of Section 41 of the NERC Act 2006. The following bat species are classified as 'UK Priority Species' requiring conservation action within the UK:

a. Barbastelle (*Barbastella barbastellus*);
b. Bechstein's bat (*Myotis bechsteinii*);
c. Brown long-eared bat (*Plecotus auritus*);
d. Greater horseshoe bat (*Rhinolophus ferrumequinum*);
e. Lesser horseshoe bat (*Rhinolophus hipposideros*);
f. Noctule (*Nyctalus noctula*); and
g. Soprano pipistrelle (*Pipistrellus pygmaeus*).

1.5.4 Barbastelle, Bechstein's bat, greater horseshoe bat and lesser horseshoe bat are amongst the UK's rarest mammals and are also listed on Annex II of the EC Habitats and Species Directive 1992 (Ref 5). Bechstein's bat and barbastelle are also listed as 'near threatened' on the IUCN global red list (Ref 6). While greater and lesser horseshoe bat are listed as 'least concern' globally they are 'near threatened' on the European red list.

1.6 Status of bats at county level

1.6.1 A total of 10 bat species have been recorded in Suffolk within the last 10 years. With reference to the Bat Distribution Atlas 1983-2016 (Ref 7) produced by the Suffolk Bat Group (SBG), and Suffolk's Priority Species list (**Error! Reference source not found.**) the following is noted on the distribution and status of bat species within the county:

Common

a. Common pipistrelle (*Pipistrellus pipistrellus*): A common species in Suffolk, as it is elsewhere in the UK, recorded widely across the county.
b. Brown long-eared bat: A common species across the county in Suffolk. Brown long-eared bats feed mainly in woodland and often roost in buildings, such as open lofts in older buildings and barns.
c. Natterer's Bat (*Myotis nattereri*): This species is common across Suffolk however the number of recordings is less concentrated than the common pipistrelle.
d. Noctule: This species is common throughout Suffolk with a particularly large number of records reported in the north-west of the county.
e. Serotine (*Eptesicus serotinus*): Within Suffolk this species is considered common due to the number of records reported across the county.
f. Soprano pipistrelle: Widespread across the county, however there is a clear absence of records towards the west of the county's centre.

Uncommon

a. Leisler's bat (*Nyctalus leisleri*): The species is not sighted across the whole of the county. There is a clear cluster of records found in the north-west of the county with a few dotted around distantly more southernly.
b. Barbastelle: Multiple records across the county with wide areas clearly containing no record of barbastelle. The number of records is significantly less than the common bat species but still cover a wide range of the county.
c. Daubenton's bat (*Myotis daubentonii*): A small range of records for this species with species density at its highest in the north-west and south of the county.

Rare

a. Whiskered (*Myotis mystacinus*): Two records of this species sighted north and north-east of the county. This species is one of the rarest in Suffolk, with a low number of records and a very small distribution across the county.

b. Nathusius' pipistrelle (*Pipistrellus nathusii*): The records provided for this species are across different locations within the county with a large absence around the south-west of the area.
c. Lesser horseshoe bat: One record of this species was sighted in the north-east of the county. This species is the rarest in Suffolk, with the lowest number of records and no other distribution across the county.
d. Brandts (*Myotis brandtii*): No records in the last 20 years.

1.7 Bat species ecology

1.7.1 All bat species in the UK are nocturnal, emerging from their roosts at dusk. Bats have been found to roost in a number of places, including trees, barns, buildings (within lofts, roof structures, basements, cladding and cavity walls), bridges and underground sites. Their preferred roosting location depends on a number of factors, such as species, gender, breeding status and time of year.

1.7.2 Bats require different conditions when hibernating over winter compared to summer roosts; summer sites include those used for maternity where female bats give birth and raise their young, satellite roosts, which are alternative roosts found in proximity to the maternity colony for smaller numbers of bats, and day roosts where individual bats or small groups of males may be found. Requirements vary according to species, with buildings, other structures (such as bridges) and trees being utilised for roosting.

1.7.3 Bats utilise an array of habitats as foraging areas, including riparian habitats, woodland and grassland, feeding on a variety of insect species. Foraging areas and insect prey differ between each species of bat, with different species adapted for hunting in a variety of ways. Many bat species are also known to use multiple different habitat types to forage, highlighting the importance of landscape scale assessment to ensure the persistence of a mosaic of habitats across important foraging areas.

1.7.4 In order to move between their roosts and foraging grounds, bats commonly use linear features as commuting corridors. Hedgerow and treelines, in addition to small patches of woodland, rivers and streams, provide protection and cover from predators and enable bats to emerge and disperse earlier. Where these features are comprised of diverse plant assemblages, suitable to support insect populations, they may be used for opportunistic foraging, with bats feeding on the way to their main foraging areas.

1.7.5 Relevant background information on species specific ecology has been used to inform surveys and assessments, including their distribution, range, suitable habitats, life cycle and threats. For example, the core sustenance zone of a species refers to the area surrounding a communal bat roost within which habitat availability and quality will have a significant influence on the resilience and conservation status of the colony using the roost. This has influenced the area in which surveys were conducted, and the scale at which impacts will be considered in the future.

2 Methodology

2.1 Desk study

2.1.1 A detailed biological records search was requested from the Suffolk Biodiversity Information Services (SBIS) in January 2023 to inform the design and assessment of the Proposed Onshore Scheme. This included a search for records of bats from within a 2km radius of the Proposed Onshore Scheme Scoping Boundary. An updated data search was conducted in April 2025 for a 2km search area of the Proposed Onshore Scheme Scoping Boundary, limited to the Walberswick option only (i.e. excluding the discounted Landfall Site at Southwold).

2.1.2 Bat records received that are over ten years old were omitted as they may not accurately represent the current status of the bat population in proximity to the Proposed Onshore Scheme, unless they were related to a relevant observation such as notable foraging activity and valuable feature, or significant roosts such as a maternity or hibernation roost.

2.1.3 A search for the presence of statutory designated sites with bat species listed as a qualifying feature was carried out for the Proposed Onshore Scheme which included nationally important sites up to 5km from the Proposed Onshore Scheme Scoping Boundary and extended out to 30km for Special Areas of Conservation (SAC). The sites were identified using sources that included the Multi-Agency Geographic Information for the Countryside (MAGIC) (Ref 0) web database and the Joint Nature Conservation Committee (JNCC) (Ref 10) website.

2.1.4 The SBIS biological records search also included a request for non-statutory sites within 2km of the Proposed Onshore Scheme Scoping Boundary. The non-statutory site citations were reviewed for any known bat roosts, or habitats with the potential to support roosting bats such as woodland, notable trees, buildings or other structures.

2.1.5 A search was also carried out for any ancient woodlands or ancient/veteran trees within 2km of the Proposed Onshore Scheme Scoping Boundary, using the MAGIC web database and results from the SBIS biological records search and the Woodland Trust Ancient Tree Inventory (Ref 11) .

2.1.6 As part of this desk study, a scoping exercise was undertaken to identify the best quality habitat to inform the scope of activity surveys, including the walked transect routes and the locations for static detector deployment. This exercise included a detailed review of available aerial imagery.

2.1.7 The MAGIC web database was also used to identify any granted Natural England bat mitigation licenses within a 2km radius of the Proposed Onshore Scheme Scoping Boundary. Information pertaining to species and the type of roosts affected (for example non-breeding or breeding sites) was also reviewed.

2.2 Field surveys

Overview

2.2.1 The desk study undertaken in 2023 identified habitats within the Proposed Onshore Scheme Scoping Boundary which had the potential to support the local bat assemblage through the provision of foraging and commuting features. The most valuable bat foraging areas identified are considered to comprise the semi-natural habitats such as woodlands, wetlands and species-rich grasslands. Mature hedgerows, woodland edge habitat and tree-lined watercourses typically provide flight lines that bats use for orientation when commuting between foraging and roosting areas, with such features also offering foraging opportunities themselves.

2.2.2 Bat activity transects and static detector surveys were undertaken between June and October 2023, and April to August 2024. The 2023 surveys were completed in accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition (2016) (Ref 12) which was relevant at the time of survey, however, the 2024 surveys were completed in line with the revised 4th edition (Ref 13), published in winter 2023.

2.2.3 Bat activity transects were focussed upon the discounted Landfall Site at Southwold (Transect 1, T1), the proposed Landfall Site at Walberswick (Transect 2, T2), and the proposed Converter Station Site to the east of Saxmundham (Transect 3, T3), and were supplemented by static detector surveys in these locations. The survey boundaries in these locations were based upon an early draft design for the Proposed Onshore Scheme and they include land within the proposed Landfall Site and the discounted Landfall Site, the proposed Converter Station Site and adjacent land. Further static detector surveys were carried out to sample areas of high habitat suitability for bats across the Proposed Onshore Scheme Scoping Boundary.

2.2.4 All surveys were undertaken in accordance with:

a. Bat Surveys for Professional Ecologists: Good Practice Guidelines (2016) (Ref 12).
b. Bat Surveys for Professional Ecologists: Good Practice Guidelines (2023) (Ref 13).
c. The CIEEM competencies for bat surveys (Ref 14).
d. The Bat Workers' Manual (Ref 15).

Activity transect surveys

2.2.5 Three transect routes (centred on the discounted Landfall Site at Southwold (T1), the proposed Landfall Site at Walberswick (T2), and the proposed Converter Station Site to the east of Saxmundham (T3)) were planned prior to the surveys commencing and routes and frequencies were designed based on each transect being of moderate suitability to bats due to the presence of continuous habitat

connecting to the wider landscape (hedgerows, watercourses and woodland edge features). The transect routes are provided in **Annex A: Bat Activity Transect Routes.**

2.2.6 The transect surveys were split across two survey seasons (2023 and 2024) and were undertaken as dusk surveys, monthly between June to October 2023, and April to August 2024 (access permitting), in accordance with guidance relating to transects of moderate suitability (Ref 12).

2.2.7 The surveys commenced at sunset and continued for approximately two hours. Transects were walked at a steady pace by two experienced surveyors stopping periodically at specific points along the transect routes to observe bat activity for periods of five minutes. The direction of passage was alternated throughout the season to ensure that different habitats along the transect route were sampled at different times before or after sunset.

2.2.8 All surveys were planned to be carried out in optimal conditions; this included a sunset temperature of 10°C or above, no rain or strong winds. Where conditions were sub-optimal or where they deteriorated during a survey, the survey lead would make a judgement on the continuation of the survey if these conditions lasted for more than half an hour. Cancelled or partially compete surveys were repeated during favourable conditions.

2.2.9 Bat activity transect surveys were led by experienced ecologists, with each survey lead holding a Natural England Bat Class Licence (Level 2 CL18 as a minimum).

2.2.10 The following survey conditions were recorded:

a. sunset, start and finish times;
b. air temperature at the survey start and finish;
c. cloud cover;
d. wind speed;
e. precipitation;
f. any changes in weather conditions throughout the survey period; and
g. survey dates and weather conditions are provided below in **Annex B: Survey Dates and Weather Conditions**.

2.2.11 All bats observed or detected along the transect routes were recorded, including (where possible) the number of bats, species, and information regarding behaviour (for example foraging or commuting) and their direction of flight. Wildlife Acoustics EchoMeter Touch Pro detectors were used during each survey.

Static detector surveys

2.2.12 Automated static detector surveys were undertaken at 17 locations (SM4-01 to SM4-17) within representative examples of suitable bat foraging and commuting habitats within the discounted Landfall Site at Southwold, the proposed Landfall Site at Walberswick, and the proposed Converter Station Site to the east of

Saxmundham in addition to across the wider Proposed Onshore Scoping Boundary. Wildlife Acoustics SM4 full spectrum bat detectors (static detectors) were used. The location of each static detector is provided in **Annex D: Automated Static Detector Results Plan**.

2.2.13 Static surveys were split over two survey seasons, with deployment undertaken monthly between June to October 2023 and April to August 2024 (access permitting), in accordance with **Table 2.1**, to monitor bat activity within key areas of habitat within the study areas.

2.2.14 Static detector surveys were designed using a proportionate approach of one static detector per transect route for T1 (discounted Landfall Site at Southwold), T2 (proposed Landfall Site at Walberswick) and T3 (the proposed Converter Station Site to the east of Saxmundham). Whilst this deviates from the recommended survey effort for moderate suitability habitats (two locations per transect route), the statics were deployed monthly instead of once per season, providing a larger continuous data set for the assessment. In addition, single static detectors were deployed strategically along the proposed Scoping Boundary to cover a range of habitat types and features. These statics were redeployed monthly, providing a large data set for the assessment.

2.2.15 Static detectors were set to begin recording 30 minutes before sunset and stop recording 30 minutes after sunrise.

Table 2.1: Guidelines on reasonable survey effort in relation to static detector surveys

Survey type	Low suitability	Moderate suitability	High suitability
Automated static detector surveys	One location per transect, data to be collected on five consecutive nights per season (spring, autumn and winter) in appropriate weather conditions for bats.	Two locations per transect, data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats.	Three locations per transect, data to be collected on five consecutive nights per month (April to October) in appropriate weather conditions for bats.

2.2.16 All detector deployments were planned to be carried out in optimal conditions; this included a sunset and pre-sunrise temperature of 10°C or above, no rain or strong winds. Weather data for temperature, wind speed and precipitation were checked from online records for the nearest weather station in Southwold to ensure that the weather had been suitable during the deployment period. Where conditions were sub-optimal surveys were repeated during favourable conditions.

2.2.17 For consistency, the same model of static bat detector was used across the site, with the same settings and microphone type. Detectors were deployed by experienced ecologists, positioning the unidirectional microphones at appropriate heights and directions to maximise the recorded activity and to avoid obstruction of sound by dense foliage or other potential sound barriers.

2.2.18 The location of each static detector was selected based on the presence of suitable habitat and features which could be used by foraging and commuting bats. Static detectors were deployed across a range of suitable habitats which could be directly or indirectly affected by the Proposed Onshore Scheme. This included hedgerows, woodlands, watercourses, and scrub habitats. A description of the habitats and features located at each static deployment location can be found in **Table 2.2** below.

2.2.19 Where possible, five consecutive nights of good quality data (recorded in appropriate weather conditions) was used. Where five consecutive nights data were not available, five non-consecutive nights (from within the extended deployment period) were used. Survey dates are provided in **Annex B: Survey Dates and Weather Conditions**.

2.2.20 A Bat Activity Index (BAI) was established for each species in each location. This provides an index of bat activity; a summary of the average bat passes per hour for each species/genus group. It is important to note that this is used to quantify bat activity, not bat abundance, which cannot be inferred from these acoustic recordings. The number of sound files recorded by the detectors each night was taken as a proxy value for the number of bat passes.

Table 2.2: Deployment location description for each static detector

Static detector ID	Feature of deployment and connected habitat/features in the wider landscape
SM4-01	A mature willow tree along a riparian corridor adjacent to the River Wang, west of Wangford. The wider landscape is dominated by pastoral farmland.
SM4-02	A mature hawthorn tree on the edge of Reydon Wood, to the east of Wangford. The wider landscape is dominated by arable farmland.
SM4-03	Standing deadwood along a field boundary hedgerow with mature trees, surrounded by arable farmland north-west of Reydon.
SM4-04	A field maple along the edge of a small private woodland off Rissemere Lane in Reydon. The wider landscape comprises a mixture of residential dwellings, a pig farm, and other pastoral and arable farmland.
SM4-05	A willow tree located along a heavily vegetated footpath bound by a line of mature trees, to the east of Reydon. This public footpath connects Reydon to Southwold Beach. The wider landscape comprises mixed-use farmland, and wet grassland associated with Buss Creek.
SM4-06	A mature oak tree along a field boundary hedgerow to the north-east of Blyford. The wider landscape is dominated by arable farmland.
SM4-07	A defunct hedgerow adjacent to a large hollow oak tree, to the west of the A12. The wider landscape comprises mixed-use farmland, and wet grassland associated with the River Blythe.
SM4-08	A partially dead elm tree within a field boundary hedgerow, to the south of the B1387 (The Street). The wider landscape is dominated by arable farmland.

Static detector ID	Feature of deployment and connected habitat/features in the wider landscape
SM4-09	A semi-mature elm tree lining a footpath from Walberswick to the Dunwich River. The wider landscape comprises a mixture of residential dwellings, a caravan park, arable farmland, and wet grassland associated with Dunwich River.
SM4-10	A large ash tree located along the vegetated banks of Dunwich River, between Hinton and Westleton. The wider landscape comprises arable farmland, with large areas of dry heath and plantation woodland to the east associated with Dunwich Forest.
SM4-11	Standing deadwood within a field boundary hedgerow, to the north of Westleton and bound by arable farmland.
SM4-12	A semi-mature elder on a woodland edge, to the north of Minsmere River. The surrounding landscape comprises arable farmland with blocks of woodland and wet grassland associated with Minsmere River.
SM4-13	A young oak tree on the edge of a small woodland between Middleton Moor and Middleton. The wider landscape comprises arable and pastoral farmland with small blocks of woodland.
SM4-14	In the centre of a large woodland block (Whin Covert), west of Theberton. Outside of the large woodland, the landscape is dominated by arable farmland.
SM4-15	A mature plum tree within a field boundary hedgerow to the south of Theberton, surrounded by large open arable fields.
SM4-16	An ash tree along a vegetated railway line between Saxmundham and Leiston. The wider landscape is dominated by arable farmland.
SM4-17	A hawthorn tree within a dense belt of vegetation leading from a new reservoir and block of woodland to the south-east of Saxmundham. The wider landscape comprises arable farmland, with rural residential dwellings and farm buildings.

2.3 Bat call analysis

2.3.1 For activity transect surveys, the analysis of bat calls recorded on Wildlife Acoustics EchoMeter Touch Pro detectors was undertaken using Wildlife Acoustics Kaleidoscope Pro software, including the use of the Auto ID function, to aid and confirm the identification of bats to species or genus level. All sound analysis was subject to a rigorous quality assurance process by a senior/technical bat specialist.

2.3.2 For static detector surveys, analysis of bat calls recorded on the Wildlife Acoustics SM4 full spectrum bat detectors were undertaken using the British Trust for Ornithology's (BTO) Acoustic Pipeline (BTO Pipeline) software (Ref 16) which included the use of Auto ID. A specified percentage of all calls assigned through the Auto ID function were subject to manual verification by a senior/technical bat specialist in line with best practice guidance (Ref 12) as follows:

a. 100% of all Annex II species
b. 100% Nathusius' pipistrelle
c. 30% of all calls not assigned to a species through the Automatic ID function (typically "noise files")
d. 30% of all "other" species (for example *Nyctalus* and *Myotis* species)
e. 10% of all common and soprano pipistrelle calls
f. 10% of noise files
g. 10% of all "non-bat" species

2.3.3 Manual verification and overall percentage accuracies of the BTO Pipelines' auto-ID function was then applied to each species and extrapolated across the dataset to provide a proportionate approach to verifying the large quantity of data collected.

2.3.4 Calls from bats belonging to the genus *Myotis* are known to produce very similar sounding calls, which are difficult to distinguish in the field, and when using bat call analysis software. The Genus comprises a number of species, including four known to be present within Suffolk: Natterer's bat, whiskered bat, Brandt's bat, and Daubenton's bat. For the purposes of this assessment the following species have been grouped and have been reported as "*Myotis sp.*". These include:

a. Alcathoe bat (*Myotis alcathoe*)
b. Bechstein's bat
c. Brandt's bat
d. Daubenton's bat
e. Natterer's bat
f. Whiskered bat

2.3.5 Grouping of *Myotis* is required to lower the probability of misidentification of species recorded during surveys. Grouping is not expected to significantly impact the results of this assessment.

2.3.6 Common pipistrelle and soprano pipistrelle calls, which look and sound similar, have peak frequencies only 10kHz apart and these calls often overlap due to call plasticity, allowing bats to adapt their calls to the habitats they are in. Therefore, to avoid misidentification of species, the label "*Pipistrellus sp.*" has been used for any calls falling within the range of peak frequency where call overlap is known to occur between 49kHz and 51kHz.

2.3.7 Noctule and Leisler's bat calls, which look and sound similar, have peak frequencies with some degree of overlap. Where it has not been possible to identify to calls to species level these calls have been assigned to genus level to avoid misidentification of species and are labelled as "*Nyctalus sp.*".

2.4 Assumptions and limitations

2.4.1 Static detector surveys were undertaken across two survey seasons (2023 and 2024). Surveys commenced in June 2023 and continued for the duration of the survey season, ending in October 2023. Land access in June and July was limited

and several static detectors could not be deployed. Static detectors were redeployed in 2024 to gather data on the missing months from 2023 surveys: this included April and May 2024 (all static locations), and June, July and August 2024 (gap filling where access was limited in 2023). The static detector surveys are not considered to be limited because of the split seasons. All data from both seasons has been combined and analysed together to replicate a full deployment year (replicating a typical spring to autumn biological cycle for UK bats).

2.4.2 Activity transect surveys were also undertaken across two survey seasons (2023 and 2024). Surveys commenced in July 2023 and continued until October 2023. It was not possible to survey any of the transect routes in April, May or June 2023 due to access limitations. Activity transect surveys were extended into 2024 to gather data on the months missing from 2023.

2.4.3 In addition, weather conditions during the October 2024 surveys deteriorated for T1; these surveys were repeated in optimal weather conditions to provide robust data for this month. Light rain was recorded at the end of the survey on T2 in April 2024, and the temperature dropped to 6°C at the end of the T2 May 2024 survey. These conditions were not considered to represent a constraint as the rest of the surveys were completed in suitable conditions and bat activity was recorded. The activity transect surveys are not considered to the limited because of split seasons or poor weather, as a full season of data (April to October) has been collected and analysed together to replicate a full deployment year.

2.4.4 The ESS published in early 2023 was developed in accordance with the Bat Surveys for Professional Ecologists: Good Practice Guidelines 3rd edition (2016) (Ref 12) ; before the publication of the updated guidelines. The activity transects and static detector surveys undertaken between June and October 2023 were therefore completed in accordance with the 2016 guidance, which was valid at the time of survey. In October 2023 (after the completion of the last October 2023 survey), a new version of the guidelines (Ref 17) was published. Given the quantity of data that was collected in 2023, in addition to a gap filling exercise required in 2024 to supplement missing data from 2023, it was deemed reasonable to complete the outstanding surveys in accordance with the 2016 superseded guidelines for data consistency.

2.4.5 With regards to the activity transect surveys, the main revision to the methodology targets the frequency of transect surveys. The 2023 guidance recommends one transect per season, whereas the 2016 guidance recommends monthly transects from May – September for moderate suitability habitats. This assessment therefore used more data than is required under the new guidance. The use of older survey methodology does not represent a constraint as the existing data goes over and above the new accepted standards. All transect surveys were undertaken at dusk, the guidance indicates that one dawn survey may give additional information however the effort is considered to be sufficient for this supplementary method to the static monitoring.

2.4.6 Static detector surveys were designed using a proportionate approach of one static detector per transect route. Whilst this deviates from the recommended survey effort for moderate suitability habitats (two locations per transect route), the statics were deployed monthly instead of once per season, providing a larger continuous data set for the assessment.

2.4.7 There is no difference between the 2016 and 2023 static detector methodology for spring, summer and autumn surveys: this report does not cover hibernation where some changes in methods are noted. The static detector surveys are therefore consistent with the new guidelines.

3 Results

3.1 Desk study

Designated sites

3.1.1 No internationally important designated SACs with bats listed as a qualifying feature are located within the 30km search area.

3.1.2 A total of 17 statutory sites of national importance are located within the 5km search area, including Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR), all of which contain habitats with the potential to support bats. The highest quality habitats identified within the statutory sites include semi-natural and wet woodlands, wetland (saltmarsh, fens, ponds, reedbeds, saltmarsh and lagoons), heathland and a range of species rich grasslands, all of which provide important opportunities for the local bat assemblage.

3.1.3 A total of 35 non-statutory designated County Wildlife Sites (CWS) are located within the 2km search area which contain habitats that have the potential to support bats. The highest quality habitats identified within these sites include ancient and semi-natural woodlands, wetlands (saltmarsh, fen, reedbeds, lakes and ponds), scrub, hedgerows, heathland, dunes, and a range of species rich grasslands, all of which provide opportunities for the local bat assemblage.

3.1.4 No designated sites for biodiversity fall within or immediately adjacent to the survey areas, although an area of Pakefield to Easton Bavents SSSI designated for geological interest is present to the north the discounted Landfall Site at Southwold.

Ancient woodland

3.1.5 No areas of ancient woodland fall within the discounted Landfall Site at Southwold, the proposed Landfall Site at Walberswick, and the proposed Converter Station Site to the east of Saxmundham.

3.1.6 Four blocks of ancient woodland were identified within the Proposed Onshore Scheme Scoping Boundary comprising Holly Hill Wood (ancient, replanted woodland), Big/Common Wood (ancient and semi-natural woodland), Hinton Long Spring (ancient and semi-natural woodland), and Grove Wood (ancient, replanted woodland).

3.1.7 Numerous other ancient woodland blocks are present within the 2km search area, including ancient and semi-natural woodland, and ancient replanted woodland. Each of these woodlands has the potential to support a diverse bat assemblage including rarer tree roosting species such as Barbastelle bats which are known to be present locally.

Notable trees

3.1.8 Data provided by SBIS has identified fourteen ancient or veteran trees within the Proposed Onshore Scheme Scoping Boundary, with numerous other ancient or veteran trees identified within the 2km search area, primarily located on the Henham Park Estate.

3.1.9 Ancient and veteran trees typically display Potential Roosting Features (PRFs) for bats because of the aging and decaying process. These trees often represent important features in the landscape as they can support notable maternity and hibernation roosts for a wide range of common or rare bat species. These trees become even more valuable when they are associated with liner features such as hedgerows, watercourses, or woodlands, all of which provide important commuting, dispersal and foraging opportunities for bats.

Bat records

3.1.10 Data received from SBIS included numerous recent records of bats from within the 2km search area. These records pertained to common and soprano pipistrelle, Daubenton's bat, Natterer's bat, noctule, barbastelle, brown long-eared bat, Nathusius' pipistrelle, and indeterminate *Pipistrellus* and *Myotis* species.

3.1.11 Observations provided with the records included notes on sex, ages and breeding status, behaviour, roost locations, roost types and occasionally a roost count (number of bats recorded exiting a roost at dusk).

3.1.12 Female barbastelle, Daubenton's bat, Natterer's bat, common pipistrelle, soprano pipistrelle, and brown long-eared bat were recorded as either being pregnant or in the post-lactation phase, indicating these species breed locally and maternity roosts are likely to be present nearby. Non-breeding females and males of these species were also recorded, in addition to non-breeding noctule, serotine and Nathusius' pipistrelle. Juvenile bats were also recorded including barbastelle, Natterer's bat, noctule, common pipistrelle, and brown long-eared bat.

3.1.13 Behavioural observations were limited to noctule and serotine foraging activity, with a total of eight separate roosts identified with dusk emergence counts ranging from one to 23 bats.

3.1.14 No significant records dating over 10 years were provided; historic records were deemed relevant if they related to significant roosts such as maternity or hibernation roosts. Further details have been provided in **Table 3.1** below.

Table 3.1: Desk study records of bats within 2km of the Proposed Onshore Scheme Scoping Boundary

Species	Number of records	Date of most recent record	Closest proximity to the Proposed Onshore Scheme Scoping Boundary (km)
Common pipistrelle	24	2023	Several locations within the Proposed Onshore Scoping Boundary including at Walberswick, Wenhaston and to the west of Friston
Soprano pipistrelle	17	2023	Several locations within the Proposed Onshore Scoping Boundary including at Walberswick and to the west of Friston
Daubenton's bat	4	2023	Within the Proposed Onshore Scoping Boundary along the River Blyth to the north-west of Blythburgh
Natterer's bat	14	2023	1.4km south-east, within the Sizewell woodland block referred to as "Fiscal Policy"
Noctule	10	2023	Within the Proposed Onshore Scoping Boundary in Walberswick, off 7 Acres Lane
Barbastelle	9	2023	1.4km south-east, within the Sizewell woodland block referred to as "Fiscal Policy"
Myotis species	1	2015	2km east, within RSPB Minsmere
Pipistrelle species	2	2022	2km east, within RSPB Minsmere
Brown long-eared bat	32	2023	Several locations within the Proposed Onshore Scoping Boundary including at Walberswick, Wenhaston and to the west of Friston
Serotine	1	2023	Approximately 15m south of the Proposed Onshore Scoping Boundary, to the east of Wenhaston
Nathusius' pipistrelle	1	2023	Within the Proposed Onshore Scoping Boundary in Walberswick, off 7 Acres Lane

Existing bat mitigation licences

3.1.15 A search for bat mitigation licences confirmed one active licence within the Proposed Onshore Scheme Scoping Boundary. This licence pertained to the destruction of a breeding roosts and resting place for brown long-eared bat and common pipistrelle in Sotherton (2018-37030-EPS-MIT, 2018 – 2028). Numerous

other licences are present within 2km of the Proposed Onshore Scoping Boundary.

3.2 Field surveys

Activity transect surveys

3.2.1 Three transect routes were surveyed across three specific survey locations including the discounted Landfall Site at Southwold (Transect 1), the proposed Landfall Site at Walberswick (Transect 2), and the proposed Converter Station Site to the east of Saxmundham (Transect 3). The routes, dates and weather conditions for each transect survey have been provided in **Annex A: Bat Activity Transect Routes** and **Annex B: Survey Dates and Weather Conditions**. **Annex C: Activity Transect Survey Results 2023 – 2024** provides a summary of the species recorded during each transect survey and the quantity of calls recorded along each transect route, per month. Total counts of bat calls across each transect has also been provided in **Annex C: Activity Transect Survey Results 2023 – 2024** to indicate abundances of each species recorded across the split season where access was permitted (June to October 2023, and April to August 2024).

Transect 1 (discounted Landfall Site at Southwold)

3.2.2 The transect route covering the discounted Landfall Site at Southwold was designed to sample a range of habitats and focused on the network of wet ditches bounding floodplain grazing marsh, coastal scrub mosaic, a pond, and a line of mature trees.

3.2.3 In total, seven species were recorded across at this transect including common pipistrelle, soprano pipistrelle, serotine, noctule, Nathusius' pipistrelle, barbastelle and Leisler's bat.

3.2.4 Common pipistrelle (305 calls) was the most frequently recorded species closely followed by soprano pipistrelle (281 calls). Serotine (24 calls), noctule (23 calls), Nathusius' pipistrelle (6 calls), barbastelle (5 calls) and Leisler's bat (1 call) were all recorded in lower numbers.

3.2.5 Common and soprano pipistrelle were recorded on each monthly survey, whereas the remaining species were encountered sporadically throughout the split survey season (2024 and 2024) as shown in **Table 3.2.** Only three species were recorded in July and October 2023 and August 2024, whereas four species were recorded in April and August 2024, five species in August 2023 and May 2024, and a peak of six species in September 2023.

Table 3.2: Transect 1 (discounted Landfall Site at Southwold) results

Date	Barbastelle	Serotine	Natterer's	*Myotis* sp.	Leisler's	Noctule	*Nyctalus* sp.	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat
27/07/2023	✓	✓							✓	✓	
24/08/2023	✓	✓				✓			✓	✓	
25/09/2023		✓			✓	✓		✓	✓	✓	
17/10/2023	✓					✓			✓	✓	
08/04/2024						✓		✓	✓	✓	
06/05/2024	✓					✓		✓	✓	✓	
06/06/2024		✓				✓			✓	✓	
12/08/2024		✓							✓	✓	

3.2.6 Activity levels varied throughout the survey season, with peak activity recorded in July 2023 (108 calls) and September 2023 (172 calls). All other months had lower activity ranging from a total of 11 to 88 calls. Peak activity in September 2023 corresponded to peak species diversity.

3.2.7 A review of the transect mapping and surveyor observations indicates that bat activity and was closely associated with a mature tree line running along the northern extent of the route, and a small pond located just south of that tree line. Common pipistrelle and soprano pipistrelle were frequently encountered along this feature, primarily foraging along the tree line in an east to west and west to east direction. Leisler's bat, serotine, noctule and barbastelle were infrequently recorded along this feature, noted as passing briefly by the surveyors.

3.2.8 The network of wet ditches running from the pond on the northern boundary, running south to Buss Creek was noted as having moderate levels of activity. Common and soprano pipistrelle were most common along these ditch features, however noctule, serotine, Nathusius' pipistrelle and Myotis species were also recorded, largely using the features to pass through the discounted Landfall Site at Southwold, with occasional bouts of foraging.

Transect 2 (proposed Landfall Site at Walberswick)

3.2.9 The transect route covering the proposed Landfall Site at Walberswick was designed to sample a range of heavily vegetated and linear habitats and focussed on dense hedgerows and mature tree lines, woodland edges, scrub, tussocky grassland and reedbed to the south of the proposed Landfall Site associated with Dunwich River.

3.2.10 In total, nine species were recorded and confirmed to species level at this location including common pipistrelle, soprano pipistrelle, brown long-eared bat,

serotine, noctule, Natterer's bat, Nathusius' pipistrelle, barbastelle and Leisler's bat. Other Myotis species were also recorded but assigned to Genus level only for the reasons outlined in 2.3.5.

3.2.11 Soprano pipistrelle was the most frequently recorded species (586 calls), followed by common pipistrelle (328 calls). Barbastelle (56 calls), serotine (33 calls), noctule (26 calls), Nathusius pipistrelle (26 calls), brown long-eared bat (8 calls), Myotis species (6 calls), Leisler's bat (4 calls) and Natterer's bat (2 calls) were all recorded in low numbers.

3.2.12 Common and soprano pipistrelle were recorded on each monthly survey, and the remaining species were encountered sporadically throughout the split survey season (2023 and 2024), which is a similar trend observed on T1 (discounted Landfall Site at Southwold) above. Only three species were recorded in April 2024, representing the lowest species diversity encountered at this location. Four species were recorded in July and September 2023, five species in October 2023 and June 2024, and a peak of seven species in June and August 2023, and June 2024, as shown in **Table 3.3.**

Table 3.3: Transect 2 (proposed Landfall Site at Walberswick) results

Date	Barbastelle	Serotine	Natterer's	*Myotis* sp.	Leisler's	Noctule	*Nyctalus* sp.	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat
28/06/2023	✓	✓			✓	✓			✓	✓	✓
13/07/2023		✓						✓	✓	✓	
03/08/2023		✓	✓			✓		✓	✓	✓	✓
05/09/2023			✓			✓			✓	✓	✓
03/10/2023	✓			✓		✓			✓	✓	
18/04/2024								✓	✓	✓	
13/05/2024		✓		✓		✓		✓	✓	✓	✓
10/06/2024				✓		✓			✓	✓	✓

3.2.13 Activity levels varied throughout the survey season, with peak activity recorded in October 2023 (357 calls). Activity was lower in June 2023 (199 calls), August 2023 (182 calls), and May 2024 (119 calls), with all other months displaying the lowest levels of activity ranging from 32 to 84 calls. Peak species diversity was recorded in June and August 2023, and May 2024.

3.2.14 A review of the transect mapping and surveyor observations indicates that bat activity was largely associated with a dense outgrown double hedgerow which runs south from the end of Stocks Lane, towards wetlands associated with

Dunwich River on the southern boundary of the transect route. Common pipistrelle and soprano pipistrelle were frequently encountered along this feature, primarily foraging and passing in a north to south, or south to north direction.

3.2.15 Low numbers of barbastelle, serotine, Leisler's bat, Myotis species, brown long-eared bat, noctule, and Nathusius pipistrelle were also recorded foraging and passing along the feature either from the north to south, or south to north. Bats were also observed commuting north along the feature before turning west to fly along the rear gardens of properties in Walberswick.

Transect 3 (proposed Converter Station Site to the east of Saxmundham)

3.2.16 The transect route covering the proposed Converter Station Site to the east of Saxmundham was designed to sample the woodland edge habitats and dense hedgerows bounding the largely open arable landscape, in addition to the field boundary ditch network.

3.2.17 In total, nine species were recorded and confirmed to species level at this location including common pipistrelle, soprano pipistrelle, brown long-eared bat, serotine, noctule, Natterer's bat, Nathusius' pipistrelle, barbastelle and Leisler's bat. Low numbers of *Nyctalus* species calls were recorded but assigned to Genus level only for the reasons outlined in paragraph 2.3.5. This genus includes both noctule and Leisler's bats which were already accounted for at this location, therefore the species count remains at nine.

3.2.18 Common pipistrelle was the most frequently recorded species (1,267 calls), followed by soprano pipistrelle (517 calls). Serotine (167 calls), noctule (97 calls), barbastelle (54 calls), Leisler's bat (34 calls) were all recorded in low numbers, with brown long-eared bat (7 calls), *Nyctalus* species (2 call), Nathusius 'pipistrelle ((1 call) and Natterer's (1 call) all recorded less than ten times across the survey season.

3.2.19 Common and soprano pipistrelle were recorded on each monthly survey. Noctule was recorded on all but one survey (absent in April 2024), and serotine was absent from two surveys (April and May 2024). All other species were encountered sporadically throughout the split survey season (2023 and 2024) as shown in **Table 3.4.** Only three species were recorded in April 2024, representing the lowest species diversity encountered at this location. Four species were recorded in May 2024, five species in June 2024, six species in July and October 2023, and a peak of seven species in August and September 2023.

Table 3.4: Transect 3 (proposed Converter Station Site to the east of Saxmundham) results

Date	Barbastelle	Serotine	Natterer's	*Myotis* sp.	Leisler's	Noctule	*Nyctalus* sp.	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat
20/07/2023	✓	✓			✓	✓			✓	✓	
10/08/2023		✓	✓		✓	✓			✓	✓	✓
26/09/2023	✓	✓			✓	✓			✓	✓	✓
10/10/2023	✓	✓				✓		✓	✓	✓	✓
16/04/2024								✓	✓	✓	
20/05/2024	✓					✓			✓	✓	
17/06/2024		✓				✓	✓		✓	✓	

3.2.20 Activity levels varied throughout the survey season, with peak activity recorded in October 2023 (979 calls). Activity levels were lower in September 2023 (465 calls), August 2023 (354 calls) and May 2024 (119 calls), and lowest in July 2023 (97 calls), June 2024 (95 calls), and April 2024 (38 calls). Peak activity in October 2023 did not correspond to peak species diversity.

3.2.21 A review of the transect mapping and surveyor observations indicates there are two areas of key activity at this transect location. The highest activity levels were associated with several the hedgerows with mature trees situated towards the eastern extent of the transect route, running parallel to the B1119 in a north to southeast direction. Common pipistrelle and soprano pipistrelle were frequently encountered foraging and flying along the feature. The hedgerows in this area also supported noctule, serotine and Leisler's which were observed foraging and largely flying along hedgerows.

3.2.22 The second area of high activity was associated with the edge of Bloomfield's Covert to the west of the transect route and a dense belt of woodland to the north of Wood Farm. Common pipistrelle and soprano pipistrelle were frequently encountered along foraging this feature. Barbastelle, serotine, brown long-eared bat, Leisler's bat and noctule were also encountered throughout the season along this feature. The majority of serotine records pertained to foraging bats, whereas the barbastelle, noctule, Lesiler's bat and brown long-eared bats were flying along the woodland edge (determined to be a brief pass by the surveyors).

Activity transect summary

3.2.23 Common and soprano pipistrelle bat calls dominate the activity transect survey data at each transect location. The next most recorded species varied from

noctule, barbastelle and serotine. Brown long-eared, Leisler's bat, Nathusius' pipistrelle and Myotis species were infrequently encountered at all locations.

3.2.24 Species diversity was consistent across all transect locations, however the quantity of calls varied significantly. The most frequently encountered species over the combined 2023 and 2024 seasons was common pipistrelle (total 1,900 calls), followed by soprano pipistrelle (1,384 calls), serotine (212 calls), noctule (150 calls), barbastelle (115 calls), Leisler's bat (39 calls), Nathusius' pipistrelle (33 calls), brown long-eared bat (15 calls), *Myotis* species (6 calls), Natterer's bat (3 calls) and *Nyctalus* species (2 calls).

3.2.25 The peak calls (highest number of calls recorded during a survey at any location) largely reflected the most frequently recorded species. Peak calls were as follows; common pipistrelle (653 calls), soprano pipistrelle (206 calls), serotine (98 calls), noctule (75 calls), barbastelle (37 calls), Leisler's bat (31 calls), Nathusius' pipistrelle (17 calls), brown long-eared bat (4 calls), *Myotis* species (3 calls), Natterer's bat (1 call) and *Nyctalus* species (2 calls).

3.2.26 Of the three transects, T3 (the proposed Converter Station Site to the east of Saxmundham) displayed the highest combined activity with a total of 2,147 calls registered over the combined 2023 and 2024 seasons. T2 (proposed Landfall Site at Walberswick) has the second highest activity with 1,075 calls, with T1 (discounted Landfall Site at Southwold) having the lowest at 645 calls.

Static detector surveys

3.2.27 Seventeen static detectors (SM4-01 to SM4-17) were deployed within the Proposed Onshore Scheme Scoping Boundary to target habitats which had been identified during the desk study exercise as having potential for commuting, dispersing and foraging bats. This included hedgerows, woodlands (including woodland edge habitat), and watercourses. The description of each static location is provided in Table 2.2 and a location plan has been provided **in Annex D: Automated Static Detector Results Plan** alongside a summary of the species recorded at each location. Full results for each static detector are tabulated at **Annex E**: **Static Detector Survey Results**.

3.2.28 Static detector surveys were also undertaken to supplement the activity transect surveys. SM4-05 was deployed along T1 (discounted Landfall Site at Southwold), SM4-09 was deployed along T2 (the proposed Landfall Site at Walberswick), and SM4-17 was deployed along T3 (the proposed Converter Station Site to the east of Saxmundham).

3.2.29 Static detector surveys identified eight species, with *Myotis* species limited to genus level. Species diversity remained consistent throughout the static detector surveys comprising barbastelle, serotine, Leisler's bat, noctule, Nathusius' pipistrelle, soprano pipistrelle, common pipistrelle, brown long-eared bat, and *Myotis* species. The species identified during the static detector surveys are

consistent with those recorded during the activity transect surveys undertaken in 2023 and 2024.

3.2.30 The following sub-sections provide a summary of bat activity per species and bat activity per static detector. Graphical representation has been provided **at Annex E: Static Detector Survey Results**.

Barbastelle

3.2.31 Barbastelle was recorded at all static detector locations. The highest levels of activity were associated with SM4-10 deployed along Dunwich River (2,545 calls), followed by SM4-03 deployed east of Wangford (2,329 calls). All other static detectors recorded moderate to low levels of barbastelle activity (ranging from 149 calls to 2,030 calls), with SM4-04 and SM4-07 showing the lowest barbastelle activity levels (149 calls and 157 calls respectively). The results indicate that barbastelle is widespread but uncommon across the Proposed Onshore Scheme Scoping Boundary, with higher activity associated with highly suitable habitats such as riparian corridors and woodlands.

Brown long-eared bat

3.2.32 Brown long-eared bat was recorded at all static detector locations. The highest levels of activity were associated with SM4-07 (633 calls) to the west of the A12 adjacent to the River Blythe marshes, followed by SM4-11 north of Westleton (498 calls) and SM4-14 west of Theberton (474 calls). All other static detectors recorded low levels of activity (ranging from 45 to 351 calls). The results indicate the brown long-eared bat are widespread. The echolocation sounds of brown long-eared bat are very quiet and may be missed by bat detectors and so the relatively low levels of recorded activity should not be used to conclude that this species is uncommon.

Common pipistrelle

3.2.33 Common pipistrelle was recorded at all static detector locations and was also the most frequently recorded species overall. The highest levels of activity were associated with SM4-12 (56,964 calls), located between Westleton and Middleton Moor. All other static detectors recorded high to moderate levels of activity (ranging from 2,143 to 42,556 calls). The lowest levels of activity were associated with SM4-08 south of the B1387 (The Street) and SM4-02 on the edge of Reydon Wood, to the east of Wangford (ranging from 2143 and 2192). The results indicate that common pipistrelle is widespread and common across the Proposed Onshore Scheme Scoping Boundary, utilising a range of habitats.

Leisler's bat

3.2.34 Leisler's bat was recorded at all static detector locations. Overall, Leisler's bat activity was low, with the highest levels of activity associated with SM4-01 located adjacent to the River Wang, west of Wangford (87 calls) and at SM4-17

south-east of Saxmundham (76 calls). All other static detectors recorded low levels of activity (ranging from 6 to 60 calls). Results indicate Leisler's are widespread but uncommon across the Proposed Onshore Scheme Scoping Boundary.

Myotis species

3.2.35 *Myotis* species were recorded at all static detector locations. The highest levels of activity were associated with SM4-01 along the River Wang, west of Wangford (4,029 calls). All other static detectors recorded low to moderate levels of activity (ranging from 275 to 2,688 calls). Results indicate that *Myotis* species are generally widespread and uncommon, with higher localised activity in proximity to riparian habitats. Daubenton's bats are a species of *Myotis* that are typically encountered along watercourses and the wider riparian zone, based on their feeding strategy (skimming prey from the water's surface). The heavy used of such habitats by Daubenton's bats is likely to be a contributing factor to the higher recordings of *Myotis* calls in association with riparian corridors.

Nathusius' pipistrelle

3.2.36 Nathusius' pipistrelle was recorded at all static detector locations. The highest levels of activity were associated with SM4-05 at Southwold (1,054 calls), and SM4-08 at Walberswick (361 calls), both of which were coastal deployment sites. All other static detectors recorded lower levels of activity (ranging from 42 to 318 calls). Results indicate that Nathusius' pipistrelle is widespread but uncommon across the Proposed Onshore Scheme Scoping Boundary. Most activity focused on the coastline habitat at Southwold, which is to be expected from this migratory species which often crosses the North Sea and is typically encountered on the east coast of the UK.

Noctule

3.2.37 Noctule was recorded at all static detector locations. The highest levels of activity were associated with SM4-17 located south-east of Saxmundham (2,291 calls). Moderate levels of activity were recorded at SM4-01 to SM4-15 (1,787 to 1,156 calls). All other static detectors recorded lower levels of activity (ranging from 220 to 981 calls). Results indicate noctule are widespread but uncommon across the Proposed Onshore Scheme Scoping Boundary, with most activity focused on areas with arable habitat bound by woodland and dense mature hedgerows.

Serotine

3.2.38 Serotine was recorded at all static detector locations. The highest levels of activity were associated with SM4-14 located within Whin Covert to the west of Theberton (2,695 calls), followed by SM4-01 along the River Wang, west of Wangford (2,397 calls). SM4-17, SM4-15, and SM4-10 all recorded moderate to

low levels of activity (ranging from 845 to 1,186 calls), with the remaining static detectors recording low levels of activity (ranging from 590 to 56 calls). The results indicate that serotine are widespread but uncommon across the Proposed Onshore Scheme Scoping Boundary, with most activity focussed within woodland (Whin Covert) and riparian corridor habitats (River Wang).

Soprano pipistrelle

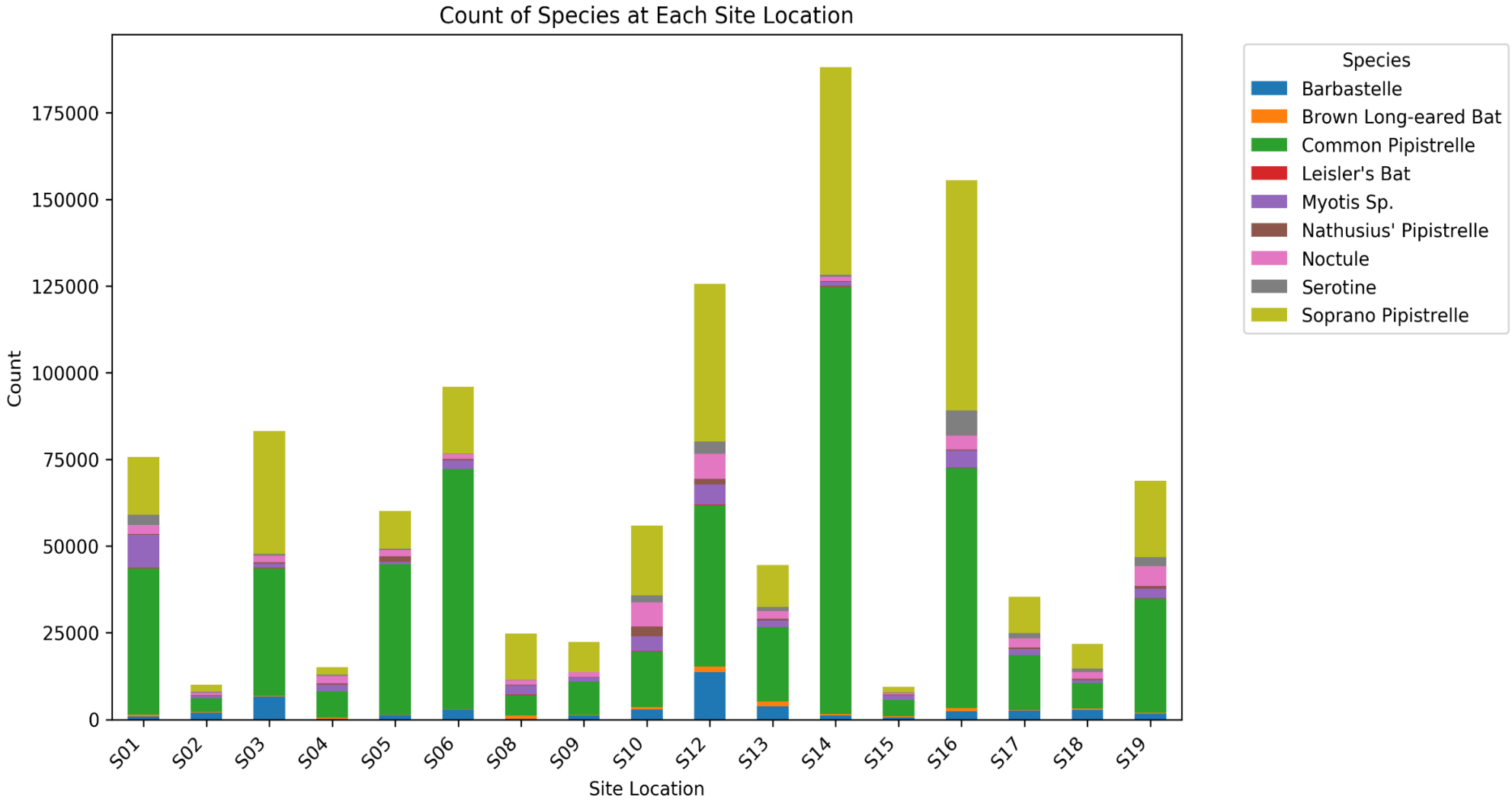
3.2.39 Soprano pipistrelle was recorded at all static detector locations and was the second most frequently encountered species. The highest levels of activity were associated with SM4-14 west of Theberton (33,294) and SM4-12 (28,896) to the north of Minsmere River. All other static detectors recorded high to moderate levels of activity (ranging from 822 to 15,549 calls). The lowest activity level was associated with SM4-02 (822 calls), on the edge of Reydon Wood, to the east of Wangford. The results indicate that soprano pipistrelle is widespread and common across the Proposed Onshore Scheme Scoping Boundary, utilising a range of habitats.

3.2.40 Combined data (number of calls) for each species recorded across each static detector has been provided below in Inset 3.1.

Static detector species summary

3.2.41 Species diversity remained consistent throughout the static detector surveys, with barbastelle, serotine, Leisler's bat, noctule, Nathusius' pipistrelle, common pipistrelle, soprano pipistrelle, *Myotis* species, and brown long-eared bat recorded at all static detector locations. A summary of activity recorded at each static detector has been provided below.

Inset 3.1: Total calls recorded for each species at each static detector across the combined season (2023 - 2024)



SM4-01

3.2.42 SM4-01 was located along a riparian corridor adjacent to the River Wang, west of Wangford. The wider landscape is dominated by pastoral farmland with pockets of woodland and dense hedgerows.

3.2.43 Overall activity levels at this location were high (ranked 5/17) with a total of 43,093 calls across the season. Activity was lowest in August (1,299 calls) and highest in May (13,989). Common pipistrelle was the most frequent species (25,719 calls), followed by soprano pipistrelle (8,139) *Myotis* species (4,029 calls). All other species were recorded less frequently with total calls per species ranging from 2392 to 87 calls).

3.2.44 When comparing the times of each registered bat call against typical emergence times for each species encountered at this location, the data indicates that several species may be roosting nearby at various times throughout the season. This included noctule, common pipistrelle, soprano pipistrelle, serotine, *Myotis* species, brown long-eared bat and barbastelle. Leisler's bat was consistently recorded >1 hour from sunset, suggesting this species was not roosting nearby.

SM4-02

3.2.45 SM4-02 was located on the edge of Reydon Wood, to the east of Wangford. The wider landscape is dominated by arable farmland with field boundary hedgerows.

3.2.46 Overall activity levels at this location were low (ranked 17/17) with a total of 4,705 calls across the season. Activity was lowest in June (307 calls) and highest in September (1,167 calls). Common pipistrelle was the most frequent species (2,192 calls), followed by barbastelle (897 calls) and soprano pipistrelle (822 calls). All other species were recorded less frequently with total calls per species ranging from 279 to six calls.

3.2.47 When comparing typical emergence times, the data indicates that barbastelle, noctule, common pipistrelle, soprano pipistrelle, *Myotis* species and Nathusius' pipistrelle may be roosting nearby at various times throughout the season.

SM4-03

3.2.48 SM4-03 was located along an arable field boundary hedgerow with mature trees along Wash Lane to the east of Reydon. The surrounded landscape is dominated by arable farmland with field boundary hedgerows.

3.2.49 Overall activity levels at this location were moderate (ranked 7/17) with a total of 30,649 calls across the season. Activity was lowest in June (326 calls) and highest in September (11,415 calls). Common pipistrelle was the most frequent species (13,697 calls), followed by soprano pipistrelle (12,955 calls) and barbastelle (2,329 calls). All other species were recorded less frequently with total calls per species ranging from 751 to 10 calls.

3.2.50 When comparing typical emergence times, the data indicates that barbastelle, noctule, common pipistrelle, soprano pipistrelle, *Myotis* species, serotine and Nathusius' pipistrelle may be roosting nearby at various times throughout the season.

SM4-04

3.2.51 SM4-04 was located along the edge of a small private woodland off Rissemere Lane in Reydon. The wider landscape comprises a mixture of residential dwellings, a pig farm, and other mixed-use farmland.

3.2.52 Overall activity levels at this location were low (ranked 14/17) with a total of 6,930 calls across the season. Activity was lowest in October (186 calls) and highest in August (2,729 calls). Common pipistrelle was the most frequent species (3,416 calls), followed by soprano pipistrelle (1,020 calls), noctule (845 calls) and *Myotis* species (771 calls). All other species were recorded less frequently with total calls per species ranging from 319 to 50 calls.

3.2.53 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, *Myotis* species, serotine and brown long-eared may be roosting nearby at various times throughout the season.

SM4-05 (Transect 1, within discounted Landfall Site at Southwold)

3.2.54 SM4-05 was located along a heavily vegetated footpath bound by a line of mature trees, to the east of Reydon. The wider landscape comprises mixed-use farmland, and wet grassland mosaics associated with Buss Creek.

3.2.55 Overall activity levels at this location were high (ranked 4/17) with a total of 44,310 calls across the season. Activity was lowest in October (2,156 calls) and highest in May (11,671 calls). Common pipistrelle was the most frequent species (32,108 calls), followed by soprano pipistrelle (8,086 calls), noctule (1,349 calls) and Nathusius' pipistrelle (1,054). All other species were recorded less frequently with total calls per species ranging from 844 to 16 calls. This static location also recorded the most Nathusius' pipistrelle calls.

3.2.56 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species and serotine may be roosting nearby at various times throughout the season.

SM4-06

3.2.57 SM4-06 was located along an arable field boundary hedgerow with mature trees, to the north-east of Blyford. The wider landscape is dominated by arable farmland with field boundary hedgerows.

3.2.58 Overall activity levels at this location were high (ranked 3/17) with a total of 62,952 calls across the season. Activity was lowest in October (3,304 calls) and highest in May (24,364 calls). Common pipistrelle was the most frequent species (42,556 calls), followed by soprano pipistrelle (15,549 calls), barbastelle (2,030

calls) and *Myotis* species (1,629 calls). All other species were recorded less frequently with total calls per species ranging from 817 to seven calls.

3.2.59 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species and barbastelle may be roosting nearby at various times throughout the season.

SM4-07

3.2.60 SM4-07 was located along a defunct hedgerow to the west of the A12, north-west of Blythburgh. The wider landscape comprises mixed-use farmland, and wet grassland mosaics associated with the River Blythe.

3.2.61 Overall activity levels at this location were low (ranked 11/17) with a total of 19,509 calls across the season. Activity was lowest in October (609 calls) and highest in July (4,778 calls). Soprano pipistrelle was the most frequent species (10,989 calls), followed by common pipistrelle (4,512 calls), *Myotis* species (1,945 calls) and noctule (981 calls). All other species were recorded less frequently with total calls per species ranging from 633 to 16 calls.

3.2.62 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species and serotine may be roosting nearby at various times throughout the season.

SM4-08

3.2.63 SM4-08 was located within an arable field boundary hedgerow, to the south of the B1387 (The Street). The wider landscape is dominated by arable farmland with field boundary hedgerows.

3.2.64 Overall activity levels at this location were moderate (ranked 12/17) with a total of 13,934 calls across the season. Activity was lowest in June (600 calls) and highest in September (5,242 calls). Common pipistrelle was the most frequent species (6,488 calls), followed by soprano pipistrelle (5,045 calls). All other species were recorded less frequently with total calls per species ranging from 741 to seven calls.

3.2.65 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species and serotine may be roosting nearby at various times throughout the season.

SM4-09 (Transect 2, to the west of proposed Landfall Site at Walberswick)

3.2.66 SM4-09 was located along a well vegetated public footpath leading from Walberswick to the Dunwich River. The wider landscape comprises a mixture of residential dwellings, a caravan park, arable farmland, and wet grassland associated with Dunwich River.

3.2.67 Overall activity levels at this location were low (ranked 15/17) with a total of 6,660 calls across the season. Activity was lowest in April (363 calls) and highest in

August (2,165 calls). Soprano pipistrelle was the most frequent species (2,299 calls), followed by common pipistrelle (2,143 calls) and noctule (800 calls). All other species were recorded less frequently with total calls per species ranging from 437 to 30 calls.

3.2.68 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species and serotine may be roosting nearby at various times throughout the season.

SM4-10

3.2.69 SM4-10 was located along the vegetated banks of Dunwich River, between Hinton and Westleton. The wider landscape comprises arable farmland, with large areas of dry heath and plantation woodland to the east associated with Dunwich Forest.

3.2.70 Overall activity levels at this location were moderate (ranked 8/17) with a total of 28,866 calls across the season. Activity was lowest in May (991 calls) and highest in September (11,080 calls). Common pipistrelle was the most frequent species (13,175 calls), followed by soprano pipistrelle (8,731 calls), barbastelle (2,545 calls), noctule (1,462 calls) and *Myotis* species (1,384 calls). All other species were recorded less frequently with total calls per species ranging from 845 to 55 calls.

3.2.71 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species, barbastelle and serotine may be roosting nearby at various times throughout the season.

SM4-11

3.2.72 SM4-11 was located within an arable field boundary hedgerow, to the north of Westleton and bound by arable farmland.

3.2.73 Overall activity levels at this location were moderate (ranked 10/17) with a total of 19,853 calls across the season. Activity was lowest in April (1,042 calls) and highest in September (5,628 calls). Common pipistrelle was the most frequent species (10,207 calls), followed by soprano pipistrelle (5,005 calls), and barbastelle (1,560 calls). All other species were recorded less frequently with total calls per species ranging from 885 to 36 calls.

3.2.74 When comparing typical emergence times, the data indicates that all species recorded at this location may be roosting nearby at various times throughout the season.

SM4-12

3.2.75 SM4-12 was located on a woodland edge, to the north of Minsmere River. The surrounding landscape comprises arable farmland with blocks of woodland and wet grassland associated with Minsmere River.

3.2.76 Overall activity levels at this location were high (ranked 1/17) with a total of 88,545 calls across the season. Activity was lowest in June (4,029 calls) and highest in April (18,764 calls). Common pipistrelle was the most frequent species (56,964 calls), followed by soprano pipistrelle (28,896 calls). All other species were recorded less frequently with total calls per species ranging from 760 to 23 calls.

3.2.77 When comparing typical emergence times, the data indicates that all species recorded at this location may be roosting nearby at various times throughout the season.

SM4-13

3.2.78 SM4-13 was located on the edge of a small woodland between Middleton Moor and Middleton. The wider landscape comprises arable and pastoral farmland with small blocks of woodland.

3.2.79 Overall activity levels at this location were low (ranked 16/17) with a total of 5,245 calls across the season. Activity was lowest in September (354 calls) and highest in June (1,380 calls). Common pipistrelle was the most frequent species (2,639 calls), followed by soprano pipistrelle (871 calls) and *Myotis* species (655 calls). All other species were recorded less frequently with total calls per species ranging from 334 to 21 calls.

3.2.80 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, *Myotis* species, barbastelle and serotine may be roosting nearby at various times throughout the season.

3.2.81 When comparing typical emergence times, the data indicates that all species recorded at this location, except for Nathusius' pipistrelle, may be roosting nearby at various times throughout the season.

SM4-14

3.2.82 SM4-14 was located in the centre of a large woodland block (Whin Covert), west of Theberton. Outside of the large woodland, the landscape is dominated by arable farmland with field boundary hedgerows.

3.2.83 Overall activity levels at this location were high (ranked 2/17) with a total of 76,325 calls across the season. Activity was lowest in October (1,036 calls) and highest in May (18,342 calls). Common pipistrelle was the most frequent species (34,448 calls), followed by soprano pipistrelle (33,292 calls). Serotine (2,695 calls), *Myotis* species (2,688 calls) and noctule (1,438) were encountered at similar rates, but all other species were recorded less frequently with total calls per species ranging from 1,127 to 60 calls.

3.2.84 When comparing typical emergence times, the data indicates that all species recorded at this location, except for Nathusius' pipistrelle, may be roosting

nearby at various times throughout the season.

SM4-15

3.2.85 SM4-15 was located within an arable field boundary hedgerow to the south of Theberton, surrounded by large open arable fields with field boundary hedgerows.

3.2.86 Overall activity levels at this location were moderate (rankled 9/17) with a total of 21,249 calls across the season. Activity was lowest in April (472 calls) and highest in June (11,995 calls). Common pipistrelle was the most frequent species (11,074 calls), followed by soprano pipistrelle (5,172 calls). Barbastelle (1,506 calls), noctule (1,159 calls) and serotine (1,057 calls) were encountered at similar rates, but all other species were recorded less frequently with total calls per species ranging from 896 to 34 calls.

3.2.87 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle and *Myotis* species may be roosting nearby at various times throughout the season.

SM4-16

3.2.88 SM4-16 was located along a vegetated railway line between Saxmundham and Leiston. The wider landscape is dominated by arable farmland with field boundary hedgerows.

3.2.89 Overall activity levels at this location were low (ranked 13/17) with a total of 11,464 calls across the season. Activity was lowest in April (486 calls) and highest in August (3,356 calls). Common pipistrelle was the most frequent species (3,881 calls), followed by soprano pipistrelle (3,747 calls), barbastelle (1,875 calls) and noctule (847 calls). All other species were recorded less frequently with total calls per species ranging from 477 to 14 calls.

3.2.90 When comparing typical emergence times, the data indicates that noctule, common pipistrelle, soprano pipistrelle, Nathusius' pipistrelle, barbastelle and *Myotis* species may be roosting nearby at various times throughout the season.

SM4-17 (Transect 3, south of the proposed Converter Station Site to the east of Saxmundham)

3.2.91 SM4-17 was located within a dense belt of vegetation leading from a new reservoir and block of woodland to the south-east of Saxmundham. The wider landscape comprises arable farmland, with rural residential dwellings and farm buildings.

3.2.92 Overall activity levels at this location were high (ranked 6/17) with a total of 32,781 calls across the season. Activity was lowest in October (659 calls) and highest in August (12,878 calls). Common pipistrelle was the most frequent species (16,053 calls), followed by soprano pipistrelle (10,856 calls). Noctule

(2,291 calls) and serotine (1,186 calls) and barbastelle (919 calls) were encountered at similar rates, but all other species were recorded less frequently with total calls per species ranging from 263 to 77 calls.

3.2.93 When comparing typical emergence times, the data indicates that all species recorded at this location, except for Nathusius' pipistrelle, may be roosting nearby at various times throughout the season.

Static detector summary

3.2.94 A total of 17 static detectors were deployed across the Proposed Onshore Scheme Scoping Boundary covering two split seasons which were combined into one dataset to represent a full active season for the local bat assemblage. The full dataset has been provided at **Annex E: Static Detector Survey Results**.

3.2.95 Static detectors with the highest activity levels (SM4-12, SM4-14, SM4-06) which ranged from 106.22 to 132.54 bat passes per hour were associated with woodland edge habitats, mature arable hedgerows, and riparian habitats linked to Minsmere River.

3.2.96 Detectors with more moderate to low activity levels (SM4-05, SM4-01, SM4-17, SM4-03, SM4-10, SM4-15, SM4-07, SM4-11, SM4-08, SM4-16) which ranged from 21.79 to 82.29 bat passes per hour were associated with riparian corridors (River Wang and Dunwich River), field boundary hedgerows with mature trees, lines of mature trees, a vegetated railway line, and wet grassland (connected to Buss Creek and River Blythe).

3.2.97 The lowest activity levels (SM4-04, SM4-09, SM4-02, SM4-13) which ranged from 7.84 to 12.25 bat passes per hour were associated with linear habitats (hedgerow and woodland edge) located on the outskirts of Southwold, and along high-quality woodland edge habitats in a more rural setting where higher activity levels would typically be expected.

3.2.98 BAI (provided in **Annex F: Bat Activity Index (BAI) Results**) confirmed that April and October had lower bat activity overall, with an average of 49.66 bat passes per hour across the month. July, September, June and August were consistent with moderate activity (ranging from 114.32 to 153.62 bat passes per hour), and May having the highest activity (226.13 bat passes per hour). This seasonal variation is as expected and follows the typical biological season for bats, with lower activity associated with emergence from hibernation, and the post-maternity activity leading into autumn. Higher activity levels are typically associated with the establishment of maternity roosts and an increase in the overall bat population as young bats leaving their maternity roosts.

3.2.99 Common and soprano pipistrelle were the most frequently recorded species across the Proposed Onshore Scheme Scoping Boundary, with a total BAI of 494 and 264 bat passes per hour respectively. Common and soprano pipistrelle were also the most dominant species at each static detector location over the season.

3.2.100 Barbastelle, an Annex II species, was recorded across the Proposed Onshore Scheme Scoping Boundary and had the third highest total BAI at 32 passes per hour. Barbastelle was recorded with moderate to low numbers of calls, with higher activity noted in proximity to Dunwich River and Wangford.

3.2.101 *Myotis* species, noctule and serotine were also recorded across the Proposed Onshore Scheme Scoping Boundary with a moderate BAI scoring 31, 30 and 20 passes per hour respectively.

3.2.102 Nathusius' pipistrelle and brown long-eared bat were encountered across the Proposed Onshore Scheme Scoping Boundary with low numbers of calls and a low BAI at 7 and 6 passes per hour respectively. Nathusius pipistrelle activity peaked at static detectors located closer to the coastline at Southwold.

3.2.103 Leisler's bat was consistently recorded across the Proposed Onshore Scheme Scoping Boundary, but with low numbers of calls, with the lowest BAI of all species at 1 pass per hour.

4 Conclusion

4.1 Desk study

4.1.1 The desk study confirmed no SACs with bats listed as a qualifying feature are located within 30km of the Proposed Onshore Scheme. Seventeen other Statutory sites including SSSIs, NNRs and LNRs are located within 5km, and 35 non-statutory CWS located within 2km, all of which have the potential to support the local bat assemblage.

4.1.2 Ancient woodlands and ancient/veteran trees represent a highly valuable resource for a range of common and rare tree-dwelling bat species. They provide valuable foraging habitat as well as year-round roosting opportunities and often support high conservation status roosts (for example hibernation or maternity roosts for Annex II species such as barbastelle). No ancient woodlands were identified within the study area; however, four blocks of ancient woodland were located within the wider landscape. Numerous other ancient and semi-natural woodland blocks are present within 2km of the Proposed Onshore Scheme Scoping Boundary. Fourteen ancient/veteran trees are present within the Proposed Onshore Scheme Boundary, with numerous others identified within the 2km search area. All the above habitats are connected to the Proposed Onshore Scheme Scoping Boundary via riparian corridors and arable field boundary hedgerows.

4.1.3 Data received from SBIS included records of locally common species such as common and soprano pipistrelle, Natterer's bat and noctule, as well as locally uncommon species including Daubenton's bat and barbastelle. All records received from SBIS pertained to individual bats recorded and heard by bat detectors or directly observed; no roost records were provided. A search on MAGIC confirmed one active bat mitigation licence within the Proposed Onshore Scheme Scoping Boundary which related to brown long-eared bat and common pipistrelle in Sotherton. Numerous other licences are present within 2km of the Proposed Onshore Scheme which indicates roosts are widespread across the wider landscape.

4.2 Activity transect survey

Transect 1 (discounted Landfall Site at Southwold and adjacent land)

4.2.1 A total of seven species were recorded from this transect route, comprising common pipistrelle, soprano pipistrelle, serotine, noctule, Nathusius' pipistrelle, barbastelle and Leisler's bat. Features regularly used for bat foraging and commuting comprised a mature tree line along the northern boundary of the discounted Landfall Site at Southwold, the wet ditch network to the south of the tree line and the pond within the discounted Landfall Site.

Transect 2 (proposed Landfall Site at Walberswick and adjacent land)

4.2.2 A minimum of ten species were recorded from this transect route, comprising common pipistrelle, soprano pipistrelle, brown long-eared bat, serotine, noctule, Natterer's bat, Nathusius' pipistrelle, barbastelle, Leisler's bat and Myotis species (genus level only).

4.2.3 A feature regularly used for bat foraging and commuting was identified, comprising a dense outgrown double hedgerow running south from the end of Stocks Lane in Walberswick, towards the habitats within the Minsmere-Walberswick statutory designated sites.

Transect 3 (proposed Converter Station Site to the east of Saxmundham and adjacent land)

4.2.4 A total of nine species were identified including common pipistrelle, soprano pipistrelle, brown long-eared bat, serotine, noctule, Natterer's bat, Nathusius' pipistrelle, barbastelle and Leisler's bat.

4.2.5 Features regularly used for bat foraging and commuting included the hedgerows situated along the eastern extent of the transect route, running parallel to the B1119 in a north to south-east direction, the edge of Bloomfield's Covert, and a dense belt of woodland to the north of Wood Farm along the western boundary of the proposed Converter Station Site to the east of Saxmundham.

4.3 Static detector summary

4.3.1 Seventeen static detectors (SM4-01 to SM4-17) were deployed across the Proposed Onshore Scheme Scoping Boundary. Surveys identified eight species including barbastelle, serotine, Leisler's bat, Nathusius' pipistrelle, soprano pipistrelle, common pipistrelle, brown long-eared bat, noctule. *Myotis* species was also recorded but limited to genus level only. Each of these species was recorded at each static detector location, but with varying levels of activity.

4.3.2 Common and soprano pipistrelle were the most frequently recorded species across the Proposed Onshore Scheme Scoping Boundary. Leisler's bat and brown long-eared bat were recorded in low numbers being the least frequently encountered species, and Nathusius' pipistrelle was also encountered across the Proposed Onshore Scheme Scoping Boundary in low numbers, but with peak activity associated with the coastline at Southwold. All other species were recorded in moderate numbers across the Proposed Onshore Scheme Scoping Boundary.

4.3.3 Static detectors with the highest activity levels (SM4-12, SM4-14, SM4-06) were associated with woodlands (including woodland edge habitats), mature dense hedgerows, and riparian corridors across the Proposed Onshore Scheme Scoping Boundary. SM4-12 was located on the edge of a woodland bounding Minsmere River towards the centre of the Proposed Onshore Scheme Scoping

Boundary in an area with ample connectivity and high value foraging habitats. SM4-14 was located within Whin Covert, a large woodland which connected back to the River Minsmere by a network of dense hedgerows and wet ditches. SM4-06 was located on a dense hedgerow towards the north of the Proposed Onshore Scheme Scoping Boundary and was connected to the large blocks of woodland and parkland surrounding Henham Estate.

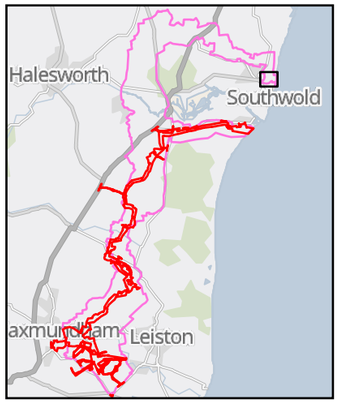
4.3.4 Detectors with moderate activity levels (SM4-05, SM4-01, SM4-17, SM4-03, SM4-10, SM4-15, SM4-07, SM4-11, SM4-08, SM4-16) were largely associated with arable field boundary hedgerows with mature trees and lines of mature trees. These locations were distributed fairly evenly across the Proposed Onshore Scheme Scoping Boundary. Detectors deployed in riparian corridors, and wet grassland mosaics linked to Buss Creek and the River Blythe also displayed moderate activity levels. Only one detector, SM4-17 (deployed along Transect 3 at proposed Converter Station Site to the east of Saxmundham) had moderate activity and was located along a woodland edge, all other locations with moderate activity were situated away from large woodland blocks.

4.3.5 The static detector (SM4-05) deployed along the mature tree line within the discounted Landfall Site at Southwold recorded the highest activity level for Nathusius' pipistrelle of all locations sampled. This linear feature may be particularly important for Nathusius' pipistrelle because they are known to migrate over the North Sea and are therefore likely to rely on linear landscape features in proximity to the coastline to navigate during their migration.

4.3.6 The lowest activity levels (SM4-04, SM4-09, SM4-02, SM4-13) were associated with habitats in proximity to residential areas such as Southwold and Walberswick, and smaller woodland blocks situated amongst an arable landscape with slightly poorer connectivity compared to the locations noted above in 4.3.3 and 4.3.4.

Annex A: Bat Activity Transect Routes

- Bat Stopping Points
- Transect 1
- Proposed Onshore Scheme Draft Order Limits
- Mean Low Water Springs
- Proposed Onshore Scheme Scoping Boundary
- Southwold Landfall Boundary



Coordinate System: British National Grid

Metres

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Rev	Date	By	Chkd	Appd	Authd
02	29/09/2025	AW	JM	SA	LC

ARUP

8 Fitzroy Street
London W1T 4BJ
Tel +44 20 7636 1531
www.arup.com

Client

National Grid LionLink Limited (NGLLL)

Project Name

LionLink

Drawing Title

Bat Activity Transect Routes

Transect 1

Scale at A3

1:3,000

Role

Bat Activity Report

Suitability

For Information

Project Number

287334-00

Rev

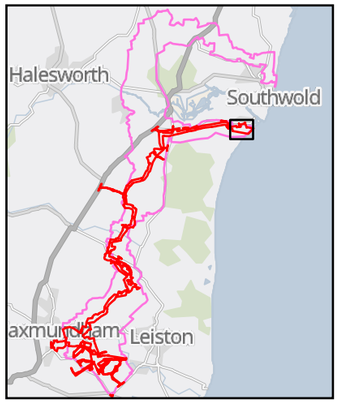
02

Drawing Number

LL-ARP-FIG-ENV-0140-P01

A3

Bat Stopping Points
Transect 2
Proposed Onshore Scheme Draft Order Limits
Mean Low Water Springs
Proposed Onshore Scheme Scoping Boundary
Walberswick Landfall Boundary



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Rev	Date	By	Chkd	Appd	Authd
02	29/09/2025	AW	JM	SA	LC

ARUP

8 Fitzroy Street
London W1T 4BJ
Tel +44 20 7636 1531
www.arup.com

Client
National Grid LionLink Limited (NGLLL)

Project Name
LIONLINK

Drawing Title
Bat Activity Transect Routes

Transect 2

Scale at A3
1:4,000

Role
Bat Activity Report

Suitability
For Information

Project Number
287334-00

Rev
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Drawing Number
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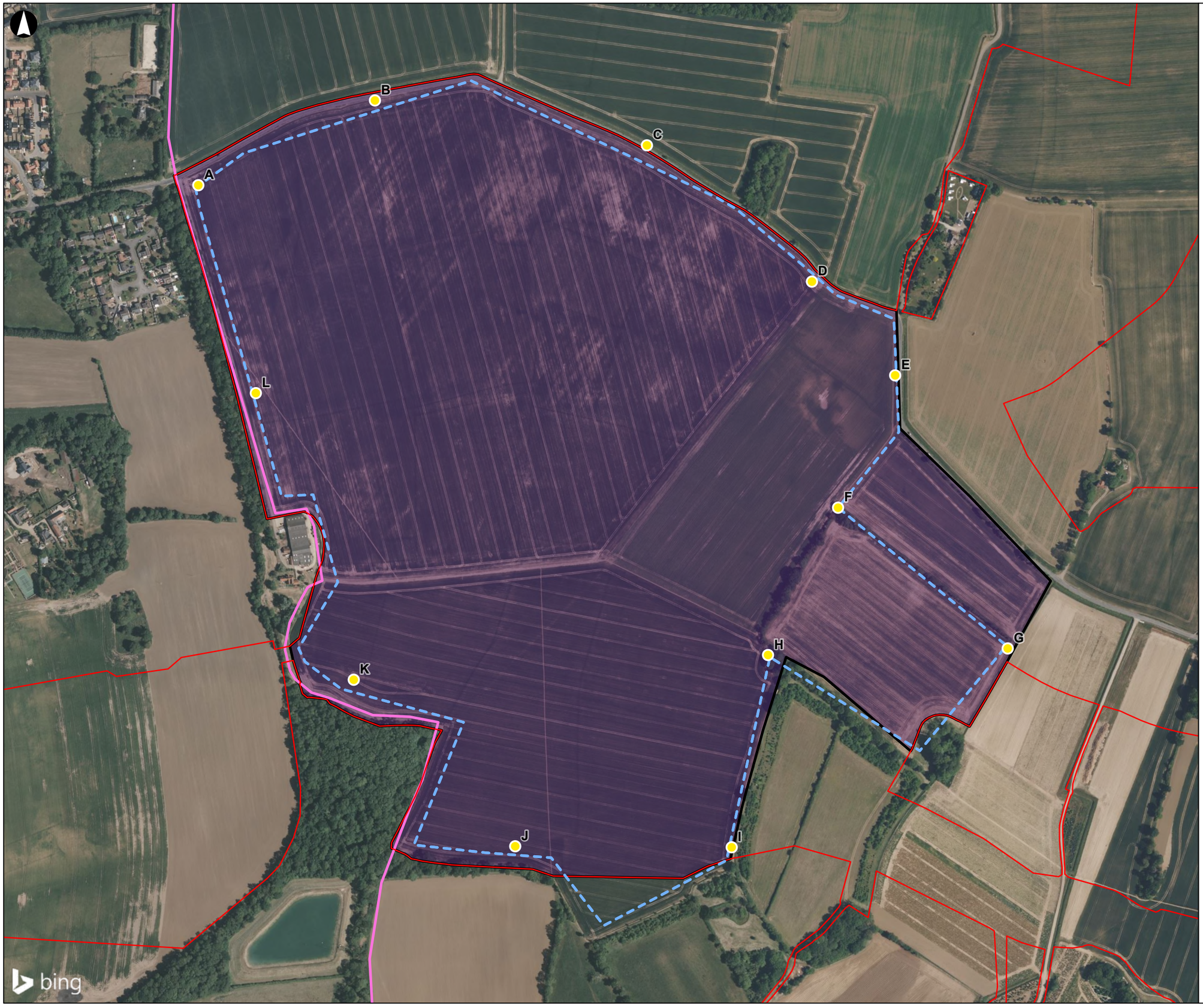
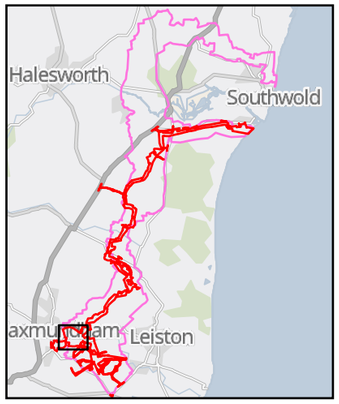
A3



Bat Stopping Points
Transect 3
Proposed Onshore Scheme Draft Order Limits
Mean Low Water Springs
Proposed Onshore Scheme Scoping Boundary
Converter Station Site



Coordinate System: British National Grid

Metres
0 25 50 100

Rev	Date	By	Chkd	Appd	Authd
02	29/09/2025	AW	JM	SA	LC

ARUP

8 Fitzroy Street
London W1T 4BJ
Tel +44 20 7636 1531
www.arup.com

Client
National Grid LionLink Limited (NGLLL)

Project Name
LIONLINK

Drawing Title
Bat Activity Transect Routes

Transect 3

Scale at A3
1:5,000

Role
Bat Activity Report

Suitability
For Information

Project Number
287334-00

Rev
02

Drawing Number
LL-ARP-FIG-ENV-0140-P01

A3

Annex B: Survey Dates and Weather Conditions

Table B.1. Activity transect surveys - dates, times and weather conditions

Survey date	Transect route	Weather conditions		Time	
		Start	Finish	Start	Finish
13/07/2023	T2	Temp: 17°C Rain: Dry BFT: 1 CC: 4/8	Temp: 14°C Rain: Dry BFT: 1 CC: 2/8	21:13	23:27
20/07/2023	T3	Temp: 15°C Rain: Dry BFT: 1 CC: 6/8	Temp: 13°C Rain: Dry BFT: 1 CC: 2/8	21:05	23:15
27/07/2023	T1	Temp: 20°C Rain: Dry BFT: 4 CC: 6/8	Temp: 19°C Rain: Dry BFT: 2 CC: 4/8	20:55	23:04
03/08/2023	T2	Temp: 16°C Rain: Dry BFT: 1 CC: 4/8	Temp: 15°C Rain: Dry BFT: 1 CC: 2/8	20:44	22:48
10/08/2023	T3	Temp: 19°C Rain: Dry BFT: 1 CC: 0	Temp: 15°C Rain: Dry BFT: 1 CC: 0	20:31	22:36
24/08/2023	T1	Temp: 20°C Rain: Dry BFT: 2 CC: 7/8	Temp: 18°C Rain: Dry BFT: 1 CC: 4/8	20:02	21:46
05/09/2023	T2	Temp: 19°C Rain: Dry BFT: 1 CC: 0	Temp: 18°C Rain: Dry BFT: 1 CC: 0	19:35	21:42
25/09/2023	T1	Temp: 18°C Rain: Dry BFT: 2 CC: 6/8	Temp: 18°C Rain: Dry BFT: 1 CC: 6/8	18:48	20:28
26/09/2023	T3	Temp: 20°C Rain: Dry BFT: 2 CC: 4/8	Temp: 19°C Rain: Dry BFT: 2 CC: 4/8	18:46	21:00
03/10/2023	T2	Temp: 15°C	Temp: 15°C	18:30	20:39

Survey date	Transect route	Weather conditions		Time	
		Start	Finish	Start	Finish
		Rain: Dry BFT: 1 CC: 7/8	Rain: Dry BFT: 1 CC: 2/8		
10/10/2023	T3	Temp: 20°C Rain: Dry BFT: 3 CC: 4/8	Temp: 19°C Rain: Dry BFT: 2 CC: 2/8	18:14	20:29
17/10/2023	T1	Temp: 13°C Rain: Dry BFT: 4 CC: 4/8	Temp: 13°C Rain: Dry BFT: 5 CC: 2/8	17:58	19:37
24/10/2023	T1	Temp: 12°C Rain: Dry BFT: 1 CC: 4/8	Temp: 11°C Rain: Dry BFT: 1 CC: 2/8	17:45	19:45
08/04/2024	T1	Temp: 12°C Rain: Dry BFT: 4 CC: 8/8	Temp: 12°C Rain: Light drizzle at 21:15 BFT: 2 CC: 8/8	19:40	21:20
16/04/2024	T3	Temp: 10°C Rain: Dry BFT: 2 CC: 4/8	Temp: 5°C Rain: Dry BFT: 1 CC: 2/8	19:57	22:04
18/04/2024	T2	Temp: 10°C Rain: Dry BFT: 2 CC: 8/8	Temp: 7°C Rain: Light drizzle BFT: 1 CC: 8/8	19:58	22:02
06/05/2024	T1	Temp: 12°C Rain: Dry BFT: 3 CC: 6/8	Temp: 12°C Rain: Dry BFT: 1 CC: 8/8	20:31	22:20
20/05/2024	T3	Temp: 12°C Rain: Dry BFT: 3 CC: 7/8	Temp: 12°C Rain: Dry BFT: 2 CC: 8/8	20:53	23:07
13/05/2024	T2	Temp: 15°C Rain: Dry BFT: 2 CC: 6/8	Temp: 14°C Rain: Dry BFT: 2 CC: 8/8	20:40	23:02
06/06/2024	T1	Temp: 17°C Rain: Dry BFT: 1 CC: 4/8	Temp: 10°C Rain: Dry BFT: 0 CC: 4/8	21:10	22:48

Survey date	Transect route	Weather conditions		Time	
		Start	Finish	Start	Finish
10/06/2024	T2	Temp: 11°C Rain: Dry BFT: 1 CC: 0	Temp: 6°C Rain: Dry BFT: 0 CC: 0	21:16	23:31
17/06/2024	T3	Temp: 15°C Rain: Dry BFT: 1 CC: 0	Temp: 13°C Rain: Dry BFT: 1 CC: 0	21:21	23:29

1. BFT – Beauford Scale
2. CC - Cloud cover (Oktas)

T1 - discounted Landfall Site at Southwold
T2 - proposed Landfall Site at Walberswick
T3 - proposed Converter Station Site to the east of Saxmundham

Table B.2. Static detector surveys - date

Static detector	Deployment date	Collection date
SM-01	• 21/09/2023 • 17/10/2023 • 08/04/2024 • 13/05/2024 • 11/06/2024 • 08/07/2024 • 13/08/2024	• 26/09/2023 • 23/10/2023 • 16/04/2024 • 20/05/2024 • 17/06/2024 • 14/07/2024 • 19/08/2024
SM-02	• 16/08/2023 • 21/09/2023 • 16/10/2023 • 08/04/2024 • 13/05/2024 • 10/06/2024 • 08/07/2024	• 22/08/2023 • 28/09/2023 • 23/10/2023 • 16/04/2024 • 20/05/2024 • 17/06/2024 • 14/07/2024
SM-03	• 16/08/2023 • 21/09/2023 • 16/10/2023 • 08/04/2024 • 13/05/2024 • 10/06/2024 • 08/07/2024	• 22/08/2023 • 28/09/2023 • 23/10/2023 • 16/04/2024 • 20/05/2024 • 17/06/2024 • 14/07/2024
SM-04	• 20/07/2023 • 16/08/2023 • 21/09/2023 • 16/10/2023 • 08/04/2024 • 13/05/2024 • 10/06/2024	• 26/07/2023 • 22/08/2023 • 26/09/2023 • 23/10/2023 • 15/04/2024 • 18/05/2024 • 16/06/2024
SM-05	• 16/08/2023 • 21/09/2023 • 16/10/2023 • 08/04/2024 • 13/05/2024 • 11/06/2024 • 08/07/2024	• 21/08/2023 • 25/09/2023 • 23/10/2023 • 16/04/2024 • 20/05/2024 • 16/06/2024 • 14/07/2024
SM-06	• 16/08/2023 • 21/09/2023 • 16/10/2023 • 09/04/2024 • 14/05/2024 • 11/06/2024 • 09/07/2024	• 22/08/2023 • 28/09/2023 • 23/10/2023 • 16/04/2024 • 21/05/2024 • 18/06/2024 • 17/07/2024

[1] Some static detectors were deployed for longer than five nights. The first five nights of data was taken from each static detector and used for the analysis in order to remove any bias from additional survey nights.

Static detector	Deployment date	Collection date
SM-07	• 21/09/2023 • 16/10/2024 • 09/04/2024 • 14/05/2024 • 11/06/2024 • 09/07/2024 • 13/08/2024	• 27/09/2023 • 23/10/2023 • 17/04/2024 • 21/05/2024 • 18/06/2024 • 16/07/2024 • 19/08/2024
SM-08	• 21/06/2023 • 20/07/2023 • 15/08/2023 • 20/09/2023 • 17/10/2023 • 09/04/2024 • 14/05/2024	• 29/06/2023 • 26/07/2023 • 21/08/2023 • 27/09/2023 • 24/10/2023 • 17/04/2024 • 21/05/2024
SM-09	• 20/06/2023 • 20/07/2023 • 15/08/2023 • 20/09/2023 • 17/10/2023 • 09/04/2024 • 14/05/2024	• 26/06/2023 • 26/07/2023 • 21/08/2023 • 27/09/2023 • 24/10/2023 • 17/04/2024 • 21/05/2024
SM-10	• 21/06/2023 • 20/07/2023 • 15/08/2023 • 20/09/2023 • 17/10/2023 • 09/04/2024 • 14/05/2024	• 29/06/2023 • 26/07/2023 • 21/08/2023 • 27/09/2023 • 24/10/2023 • 17/04/2024 • 21/05/2024
SM-11	• 20/06/2023 • 20/07/2023 • 15/08/2023 • 20/09/2023 • 17/10/2023 • 09/04/2024 • 14/05/2024	• 26/06/2023 • 26/07/2023 • 21/08/2023 • 27/09/2023 • 24/10/2023 • 17/04/2024 • 21/05/2024
SM-12	• 20/06/2023 • 19/07/2023 • 15/08/2023 • 20/09/2023 • 17/10/2023 • 10/04/2024 • 15/05/2024	• 29/06/2023 • 25/07/2023 • 22/08/2023 • 27/09/2023 • 24/10/2023 • 17/04/2024 • 22/05/2024
SM-13	• 20/06/2023 • 19/07/2023 • 15/08/2023 • 19/09/2023	• 29/06/2023 • 25/07/2023 • 22/08/2023 • 26/09/2023

Static detector	Deployment date	Collection date
	• 17/10/2023 • 10/04/2024 • 15/05/2024	• 24/10/2023 • 17/04/2024 • 22/05/2024
SM-14	• 19/06/2023 • 19/07/2023 • 14/08/2023 • 19/09/2023 • 18/10/2023 • 10/04/2024 • 15/05/2024	• 28/06/2023 • 25/07/2023 • 21/08/2023 • 26/09/2023 • 24/10/2023 • 16/04/2024 • 22/05/2024
SM-15	• 19/06/2023 • 19/07/2023 • 14/08/2023 • 19/09/2023 • 18/10/2023 • 10/04/2024 • 15/05/2024	• 28/06/2023 • 25/07/2023 • 21/08/2023 • 26/09/2023 • 24/10/2023 • 16/04/2024 • 22/05/2024
SM-16	• 14/08/2023 • 19/09/2023 • 18/10/2023 • 10/04/2024 • 15/05/2024 • 11/06/2024 • 09/07/2024	• 20/08/2023 • 25/09/2023 • 25/10/2023 • 17/04/2024 • 22/05/2024 • 18/06/2024 • 16/07/2024
SM-17	• 19/06/2023 • 19/07/2023 • 14/08/2023 • 19/09/2023 • 18/10/2023 • 10/04/2024 • 15/05/2024	• 28/06/2023 • 25/07/2023 • 21/08/2023 • 26/09/2023 • 24/10/2023 • 16/04/2024 • 22/05/2024

Annex C: Activity Transect Survey Results 2023 – 2024

Table C.1. Activity transect survey results

	Date	Barbastelle	Serotine	Natterer's	*Myotis* sp.	Leisler's	Noctule	*Nyctalus* sp.	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat	Totals
T1	27/07/2023	0	12	0	0	0	0	0	0	74	22	0	108
	24/08/2023	1	3	0	0	0	4	0	0	26	26	0	60
	25/09/2023	0	5	0	0	1	4	0	3	50	109	0	172
	17/10/2023	1	0	0	0	0	0	0	0	2	8	0	11
	08/04/2024	0	0	0	0	0	3	0	2	30	25	0	60
	06/05/2024	3	0	0	0	0	9	0	1	60	15	0	88
	06/06/2024	0	3	0	0	0	3	0	0	39	28	0	73
	12/08/2024	0	1	0	0	0	0	0	0	24	48	0	73
T1 Total		5	24	0	0	1	23	0	6	305	281	0	645
T2	28/06/2023	**37***	19	0	0	4	1	0	0	104	33	1	199
	13/07/2023	0	3	0	0	0	0	0	4	37	40	0	84
	03/08/2023	0	4	**1***	0	0	4	0	4	53	114	2	182
	05/09/2023	0	0	1	0	0	0	0	0	14	68	1	84
	03/10/2023	19	0	0	**3***	0	1	0	0	49	**125***	0	357
	18/04/2024	0	0	0	0	0	0	0	1	13	56	0	32
	13/05/2024	0	7	0	2	0	5	0	**17***	47	63	3	144
	10/06/2024	0	0	0	1	0	19	0	0	11	87	1	119
T2 Total		56	33	2	6	4	30	0	26	328	586	8	1079

	Date	Barbastelle	Serotine	Natterer's	*Myotis* sp.	Leisler's	Noctule	*Nyctalus* sp.	Nathusius' pipistrelle	Common pipistrelle	Soprano pipistrelle	Brown long-eared bat	Totals
T3	20/07/2023	3	9	0	0	2	13	0	0	37	33	0	97
	10/08/2023	0	49	1	0	**31***	**75***	0	0	166	30	2	354
	26/09/2023	33	5	0	0	1	4	0	0	287	134	1	465
	10/10/2023	16	**98***	0	0	0	2	0	0	**653***	206	**4***	979
	16/04/2024	0	0	0	0	0	0	0	1	13	24	0	38
	20/05/2024	2	0	0	0	0	2	0	0	79	36	0	119
	17/06/2024	0	6	0	0	0	1	**2***	0	32	54	0	95
T3 Total		54	167	1	0	34	97	2	1	1267	517	7	2147
Combined Totals		**115**	**212**	**3**	**6**	**39**	**150**	**2**	**33**	**1900**	**1384**	**15**	

*Peak in activity per species

Annex D: Automated Static Detector Results Plan

Barbastelle
Brown long-eared bat
Common pipistrelle
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-01

Barbastelle
Brown long-eared bat
Common pipistrelle
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-02

SM4-03

Barbastelle
Brown long-eared bat
Common pipistrelle
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-04

Barbastelle
Brown long-eared bat
Common pipistrelle
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-05

Barbastelle
Brown long-eared bat
Common pipistrelle
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-06

Barbastelle
Brown long-eared bat
Common pipistrelle
Daubenton
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-07

Barbastelle
Brown long-eared bat
Common pipistrelle
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

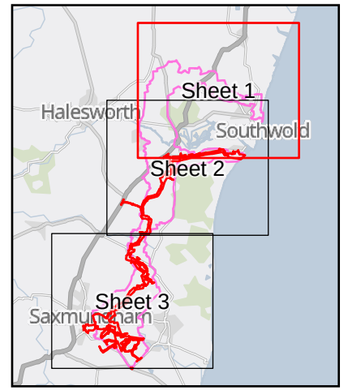
SM4-08

Barbastelle
Brown long-eared bat
Common pipistrelle
Daubenton
Leisler's bat
Myotis species
Nathusius' pipistrelle
Noctule
Serotine
Soprano pipistrelle

SM4-09

Sheet 2

- Bat Static Deployment
- Proposed Onshore Scheme Draft Order Limits
- Mean Low Water Springs
- Proposed Onshore Scheme Scoping Boundary



Coordinate System: British National Grid

Kilometres

0 0.5 1 2

Rev	Date	By	Chkd	Appd	Authd
02	29/09/2025	AW	JM	SA	LC

ARUP

8 Fitzroy Street
London W1T 4BJ
Tel +44 20 7636 1531
www.arup.com

Client

National Grid LionLink Limited (NGLLL)

Project Name

LIONLINK

Drawing Title

Automated Static Detector Results Plan

Sheet 1 of 3

Scale at A3

1:35,000

Role

Bat Activity Report

Suitability

For Information

Project Number

287334-00

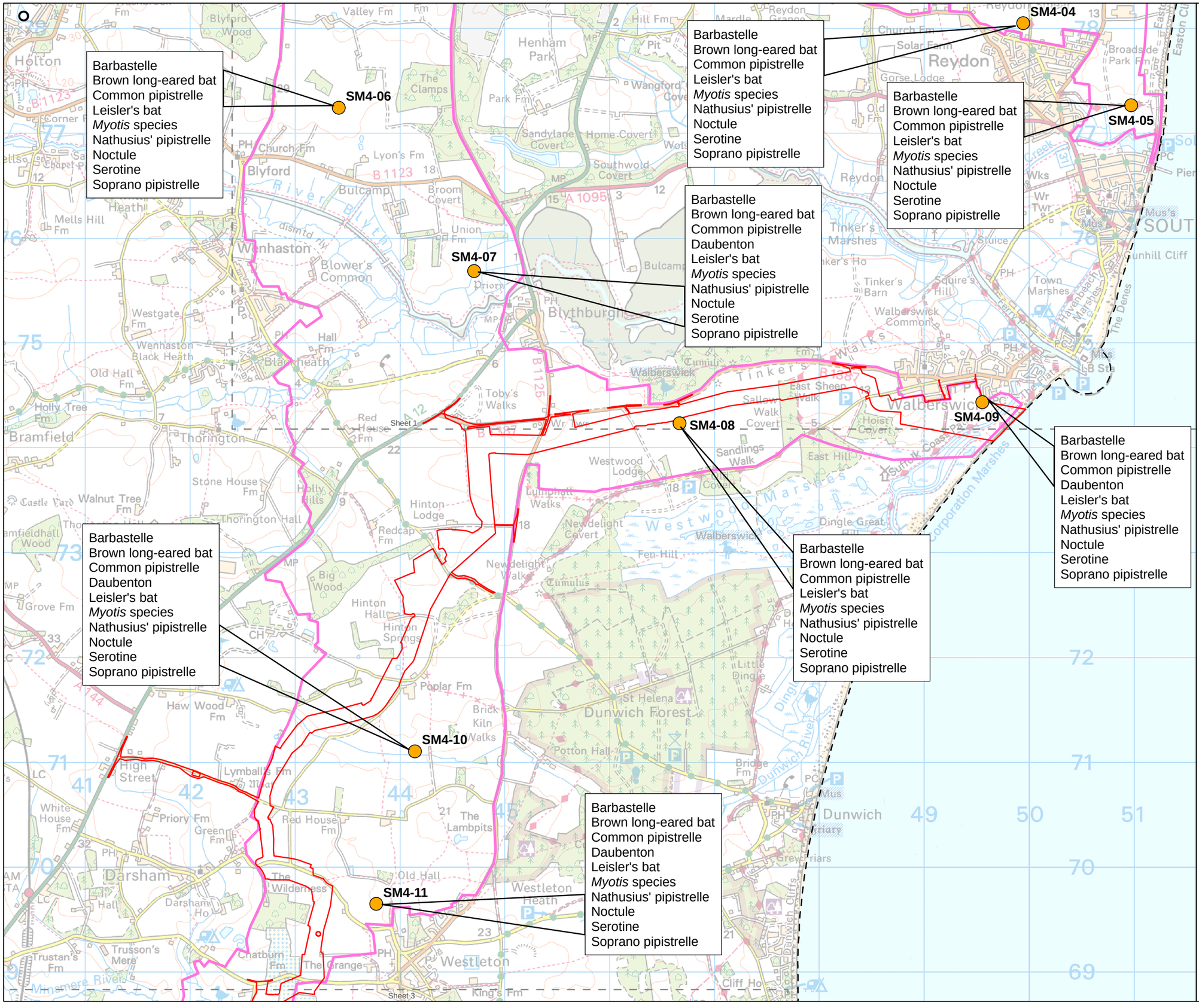
Rev

02

Drawing Number

LL-ARP-FIG-ENV-0136-P01

A3

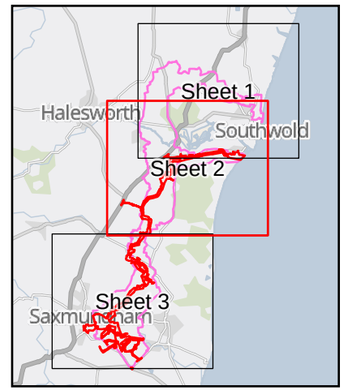


Bat Static Deployment

Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

Proposed Onshore Scheme Scoping Boundary



Coordinate System: British National Grid

Kilometres

0 0.5 1 2

Rev	Date	By	Chkd	Appd	Authd
02	29/09/2025	AW	JM	SA	LC

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Project Name

LIONLINK

Drawing Title

Automated Static Detector Results Plan

Sheet 2 of 3

Scale at A3

1:35,000

Role

Bat Activity Report

Suitability

For Information

Project Number

287334-00

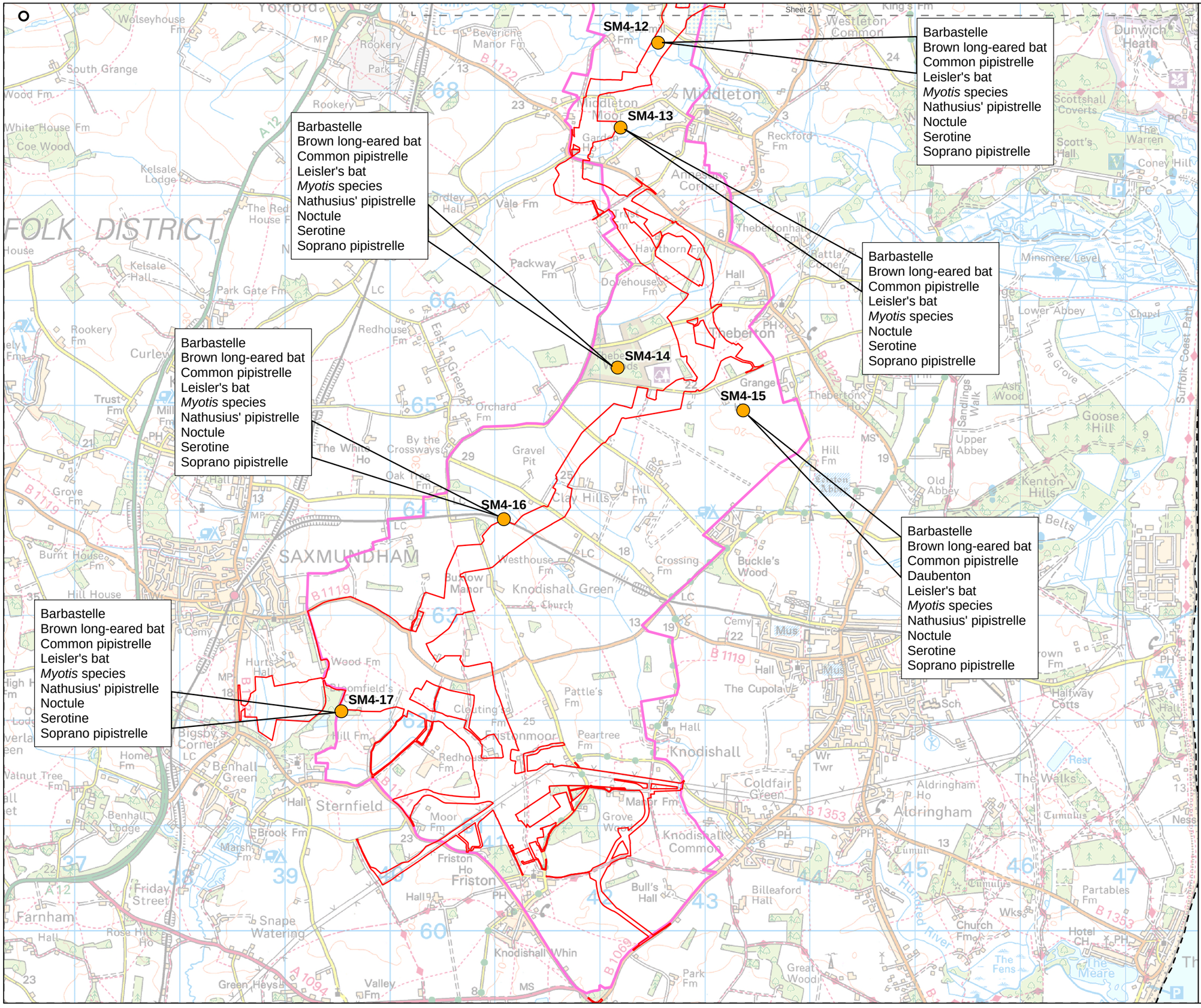
Rev

02

Drawing Number

LL-ARP-FIG-ENV-0136-P01

A3



Bat Static Deployment

Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

Proposed Onshore Scheme Scoping Boundary

Coordinate System: British National Grid

Kilometres

0 0.5 1 2

Rev	Date	By	Chkd	Appd	Authd
02	29/09/2025	AW	JM	SA	LC

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Project Name

LIONLINK

Drawing Title

Automated Static Detector Results Plan

Sheet 3 of 3

Scale at A3

1:35,000

Role

Bat Activity Report

Suitability

For Information

Project Number

287334-00

Rev

02

Drawing Number

LL-ARP-FIG-ENV-0136-P01

A3

Annex E: Static Detector Survey Results

Table E.1. Monthly static detector survey results (total calls per species)

Static detector	Species	April	May	June	July	August	September	October	Total
SM4-01	Barbastelle	366	38	13	25	17	38	126	623
	Brown Long-eared Bat	13	41	1	8	21	109	22	215
	Common Pipistrelle	1221	11673	1905	3123	833	3289	3675	25719
	Leisler's Bat	7	28	0	45	0	4	3	87
	Myotis Sp.	246	108	662	142	110	1663	1098	4029
	Nathusius' Pipistrelle	5	42	1	2	0	0	52	102
	Noctule	42	170	158	1018	13	370	16	1787
	Serotine	158	1042	213	708	23	243	5	2392
	Soprano Pipistrelle	472	847	727	1670	282	2436	1705	8139
	Total	2530	13989	3680	6741	1299	8152	6702	43093
SM4-02	Barbastelle	95	51	52	86	19	353	188	844
	Brown Long-eared Bat	7	12	4	9	13	58	4	107
	Common Pipistrelle	262	247	190	841	238	293	121	2192
	Leisler's Bat	2	2	0	0	2	0	0	6
	Myotis Sp.	43	5	3	19	89	105	11	275
	Nathusius' Pipistrelle	1	1	0	3	44	50	1	100
	Noctule	10	21	19	81	84	52	12	279
	Serotine	7	7	5	3	28	30	0	80
	Soprano Pipistrelle	129	39	34	26	71	226	297	822

Static detector	Species	April	May	June	July	August	September	October	Total
	Total	556	385	307	1068	588	1167	634	4705
SM4-03	Barbastelle	49	76	18	48	172	846	1120	2329
	Brown Long-eared Bat	7	4	6	17	18	29	10	91
	Common Pipistrelle	225	1024	133	928	4693	2989	3705	13697
	Leisler's Bat	0	0	0	6	2	2	0	10
	Myotis Sp.	12	15	1	4	222	143	52	449
	Nathusius' Pipistrelle	3	13	0	1	67	21	16	121
	Noctule	14	20	34	126	287	235	35	751
	Serotine	23	50	5	13	141	10	4	246
	Soprano Pipistrelle	431	580	129	568	1095	7140	3012	12955
	Total	764	1782	326	1711	6697	11415	7954	30649
SM4-04	Barbastelle	93	18	4	0	12	6	16	149
	Brown Long-eared Bat	2	30	11	56	46	22	12	179
	Common Pipistrelle	214	448	158	588	1542	392	74	3416
	Leisler's Bat	0	22	23	0	3	2	0	50
	Myotis Sp.	20	55	57	88	345	178	28	771
	Nathusius' Pipistrelle	8	22	1	7	71	60	11	180
	Noctule	36	66	66	44	253	359	21	845
	Serotine	9	122	128	18	29	10	3	319
	Soprano Pipistrelle	101	163	36	180	428	92	21	1021
	Total	483	946	484	981	2729	1121	186	6930
SM4-05	Barbastelle	26	31	233	130	122	209	93	844

Static detector	Species	April	May	June	July	August	September	October	Total
	Brown Long-eared Bat	6	10	2	2	5	11	9	45
	Common Pipistrelle	4899	8591	4541	7019	1716	3538	1804	32108
	Leisler's Bat	0	4	0	9	2	0	1	16
	Myotis Sp.	29	20	25	24	210	68	19	395
	Nathusius' Pipistrelle	109	249	195	23	53	374	51	1054
	Noctule	62	241	553	195	130	137	31	1349
	Serotine	2	2	10	390	9	0	0	413
	Soprano Pipistrelle	898	2523	1633	685	629	1570	148	8086
	Total	6031	11671	7192	8477	2876	5907	2156	44310
SM4-06	Barbastelle	62	820	86	271	463	127	201	2030
	Brown Long-eared Bat	5	20	7	9	10	19	3	73
	Common Pipistrelle	3470	14348	2373	2444	7550	10187	2184	42556
	Leisler's Bat	1	2	0	4	0	0	0	7
	Myotis Sp.	207	556	18	34	267	319	228	1629
	Nathusius' Pipistrelle	2	26	0	8	139	58	2	235
	Noctule	52	138	66	137	266	142	16	817
	Serotine	4	6	3	19	16	7	1	56
	Soprano Pipistrelle	3979	8448	533	460	650	810	669	15549
	Total	7782	24364	3086	3386	9361	11669	3304	62952
SM4-07	Barbastelle	3	5	48	1	8	90	2	157
	Brown Long-eared Bat	34	8	187	54	142	177	31	633
	Common Pipistrelle	699	778	1351	867	337	380	100	4512

Static detector	Species	April	May	June	July	August	September	October	Total
	Leisler's Bat	0	2	3	2	4	1	6	18
	Myotis Sp.	119	88	124	594	261	716	43	1945
	Nathusius' Pipistrelle	2	6	14	15	1	62	6	106
	Noctule	375	72	48	95	100	255	36	981
	Serotine	3	1	34	24	88	18	0	168
	Soprano Pipistrelle	1027	1397	2894	3126	808	1352	385	10989
	Total	2262	2357	4703	4778	1749	3051	609	19509
SM4-08	Barbastelle	21	156	31	17	47	299	85	656
	Brown Long-eared Bat	6	14	3	3	5	45	8	84
	Common Pipistrelle	682	1874	219	584	990	1859	280	6488
	Leisler's Bat	0	0	1	1	2	2	1	7
	Myotis Sp.	7	20	41	278	294	83	16	739
	Nathusius' Pipistrelle	4	6	18	4	59	15	1	107
	Noctule	79	19	19	62	273	266	23	741
	Serotine	3	1	31	6	21	4	0	66
	Soprano Pipistrelle	248	332	237	648	594	2669	318	5046
	Total	1050	2422	600	1603	2285	5242	732	13934
SM4-09	Barbastelle	0	1	4	0	17	15	207	244
	Brown Long-eared Bat	1	3	1	3	21	22	9	60
	Common Pipistrelle	82	425	547	147	614	228	100	2143
	Leisler's Bat	0	13	7	2	6	1	1	30
	Myotis Sp.	11	50	16	36	186	110	28	437

Static detector	Species	April	May	June	July	August	September	October	Total
	Nathusius' Pipistrelle	24	85	47	14	96	81	14	361
	Noctule	155	42	38	38	279	245	3	800
	Serotine	10	20	145	27	58	19	7	286
	Soprano Pipistrelle	80	393	248	127	888	321	242	2299
	Total	363	1032	1053	394	2165	1042	611	6660
SM4-10	Barbastelle	105	45	148	64	358	1709	116	2545
	Brown Long-eared Bat	65	16	20	7	120	104	19	351
	Common Pipistrelle	2954	779	2128	1641	861	3923	889	13175
	Leisler's Bat	0	1	20	1	32	1	0	55
	Myotis Sp.	132	72	224	148	384	321	103	1384
	Nathusius' Pipistrelle	0	2	51	6	208	45	6	318
	Noctule	12	9	275	84	713	351	18	1462
	Serotine	18	6	326	37	440	15	3	845
	Soprano Pipistrelle	662	61	407	429	257	4611	2304	8731
	Total	3948	991	3599	2417	3373	11080	3458	28866
SM4-11	Barbastelle	44	60	133	182	281	749	111	1560
	Brown Long-eared Bat	8	15	31	23	230	180	11	498
	Common Pipistrelle	670	1559	1123	1296	1888	2626	1045	10207
	Leisler's Bat	1	2	11	3	17	1	1	36
	Myotis Sp.	51	17	158	158	259	188	54	885
	Nathusius' Pipistrelle	0	0	24	0	119	48	5	196
	Noctule	15	68	99	49	514	121	10	876

Static detector	Species	April	May	June	July	August	September	October	Total
	Serotine	22	74	144	62	284	2	2	590
	Soprano Pipistrelle	231	134	656	430	1618	1713	223	5005
	Total	1042	1929	2379	2203	5210	5628	1462	19853
SM4-12	Barbastelle	26	66	66	35	95	187	40	515
	Brown Long-eared Bat	145	5	14	6	18	61	14	263
	Common Pipistrelle	11135	12326	2417	4718	11350	9845	5173	56964
	Leisler's Bat	3	0	6	7	3	1	3	23
	Myotis Sp.	313	103	83	30	52	140	55	776
	Nathusius' Pipistrelle	9	7	24	3	21	15	4	83
	Noctule	21	88	124	213	102	125	42	715
	Serotine	31	8	100	31	97	31	12	310
	Soprano Pipistrelle	7081	4362	1195	1537	2219	8742	3760	28896
	Total	18764	16965	4029	6580	13957	19147	9103	88545
SM4-13	Barbastelle	64	41	58	8	28	66	39	304
	Brown Long-eared Bat	36	29	124	60	55	25	5	334
	Common Pipistrelle	281	207	825	426	666	84	150	2639
	Leisler's Bat	3	2	6	0	3	5	2	21
	Myotis Sp.	129	43	26	53	66	74	264	655
	Nathusius' Pipistrelle	1	0	13	1	11	16	0	42
	Noctule	1	49	102	11	42	7	8	220
	Serotine	11	17	57	23	33	15	3	159
	Soprano Pipistrelle	130	48	169	115	293	62	54	871

Static detector	Species	April	May	June	July	August	September	October	Total
	Total	656	436	1380	697	1197	354	525	5245
SM4-14	Barbastelle	116	147	255	137	212	210	50	1127
	Brown Long-eared Bat	5	165	60	69	90	82	3	474
	Common Pipistrelle	2688	10030	5938	2953	6586	5918	335	34448
	Leisler's Bat	0	5	1	18	30	6	0	60
	Myotis Sp.	950	516	102	90	320	634	76	2688
	Nathusius' Pipistrelle	3	22	17	5	46	8	0	101
	Noctule	25	21	83	103	1020	177	9	1438
	Serotine	316	22	33	721	1203	391	9	2695
	Soprano Pipistrelle	7366	7414	3055	2596	5996	6313	554	33294
	Total	11469	18342	9544	6692	15503	13739	1036	76325
SM4-15	Barbastelle	45	352	557	77	16	431	28	1506
	Brown Long-eared Bat	3	27	42	15	3	13	6	109
	Common Pipistrelle	77	659	8037	729	1117	300	155	11074
	Leisler's Bat	0	1	26	0	4	2	1	34
	Myotis Sp.	197	39	215	117	219	102	7	896
	Nathusius' Pipistrelle	1	1	189	4	35	15	0	245
	Noctule	1	58	349	67	465	195	21	1156
	Serotine	10	11	830	17	186	3	0	1057
	Soprano Pipistrelle	138	649	1750	1130	388	853	264	5172
	Total	472	1797	11995	2156	2433	1914	482	21249
SM4-16	Barbastelle	37	309	742	327	157	213	91	1876

Static detector	Species	April	May	June	July	August	September	October	Total
	Brown Long-eared Bat	12	6	17	9	81	23	6	154
	Common Pipistrelle	165	742	470	884	1018	380	222	3881
	Leisler's Bat	2	2	0	6	2	1	1	14
	Myotis Sp.	9	25	43	21	151	54	34	337
	Nathusius' Pipistrelle	0	2	0	2	93	25	11	133
	Noctule	9	89	71	190	357	80	51	847
	Serotine	102	10	48	30	220	58	9	477
	Soprano Pipistrelle	150	463	195	1292	1277	181	187	3745
	Total	486	1648	1586	2761	3356	1015	612	11464
SM4-17	Barbastelle	35	408	70	52	141	75	138	919
	Brown Long-eared Bat	11	22	23	8	28	28	10	130
	Common Pipistrelle	591	4096	3541	1071	6242	419	92	16052
	Leisler's Bat	7	7	20	13	27	2	0	76
	Myotis Sp.	25	60	74	86	548	85	130	1008
	Nathusius' Pipistrelle	0	10	40	1	163	46	3	263
	Noctule	270	109	166	376	1128	223	19	2291
	Serotine	113	60	291	253	409	60	0	1186
	Soprano Pipistrelle	408	2718	2294	373	4192	604	267	10856
	Total	1460	7490	6519	2233	12878	1542	659	32781

Annex F: Bat Activity Index (BAI) Results

Table F.1. Bat Activity Index (BAI)

Static detector	Species	April	May	June	July	August	September	October	Total
SM4-01	Barbastelle	0.155	0.079	0.03	0.052	0.029	0.053	0.155	0.553
	Brown Long-eared Bat	0.027	0.085	0.002	0.016	0.036	0.153	0.027	0.346
	Common Pipistrelle	4.537	24.318	4.535	6.506	1.461	4.645	4.537	50.539
	Leisler's Bat	0.003	0.058	0	0.093	0	0.005	0.003	0.162
	Myotis Sp.	1.355	0.225	1.576	0.295	0.192	2.348	1.355	7.346
	Nathusius' Pipistrelle	0.064	0.087	0.002	0.004	0	0	0.064	0.221
	Noctule	0.019	0.354	0.376	2.12	0.028	0.522	0.019	3.438
	Serotine	0.006	2.17	0.507	1.475	0.04	0.343	0.006	4.547
	Soprano Pipistrelle	2.104	1.764	1.73	3.479	0.494	3.44	2.104	15.115
	Total	8.27	29.14	8.758	14.04	2.28	11.509	8.27	82.267
SM4-02	Barbastelle	0.232	0.106	0.123	0.179	0.015	0.498	0.232	1.385
	Brown Long-eared Bat	0.004	0.025	0.009	0.018	0.008	0.081	0.004	0.149
	Common Pipistrelle	0.149	0.514	0.452	1.752	0.398	0.413	0.149	3.827
	Leisler's Bat	0	0.004	0	0	0	0	0	0.004
	Myotis Sp.	0.013	0.01	0.007	0.039	0.124	0.148	0.013	0.354

Static detector	Species	April	May	June	July	August	September	October	Total
	Nathusius' Pipistrelle	0.001	0.002	0	0.006	0.059	0.07	0.001	0.139
	Noctule	0.014	0.043	0.045	0.168	0.128	0.073	0.014	0.485
	Serotine	0	0.014	0.011	0.006	0.036	0.042	0	0.109
	Soprano Pipistrelle	0.366	0.081	0.08	0.054	0.105	0.319	0.366	1.371
	Total	0.779	0.799	0.727	2.222	0.873	1.644	0.779	7.823
SM4-03	Barbastelle	1.382	0.158	0.042	0.1	0.301	1.194	1.382	4.559
	Brown Long-eared Bat	0.012	0.008	0.014	0.035	0.031	0.04	0.012	0.152
	Common Pipistrelle	4.574	2.133	0.316	1.933	8.233	4.221	4.574	25.984
	Leisler's Bat	0	0	0	0.012	0.003	0.002	0	0.017
	Myotis Sp.	0.064	0.031	0.002	0.008	0.389	0.201	0.064	0.759
	Nathusius' Pipistrelle	0.019	0.027	0	0.002	0.117	0.296	0.019	0.48
	Noctule	0.043	0.041	0.08	0.262	0.503	0.331	0.043	1.303
	Serotine	0.004	0.104	0.011	0.027	0.247	0.014	0.004	0.411
	Soprano Pipistrelle	3.718	1.208	0.307	1.183	1.921	10.084	3.718	22.139
	Total	9.816	3.71	0.772	3.562	11.745	16.383	9.816	55.804
SM4-04	Barbastelle	0.019	0.037	0.009	0	0.021	0.008	0.019	0.113
	Brown Long-eared Bat	0.014	0.062	0.026	0.116	0.08	0.031	0.014	0.343
	Common Pipistrelle	0.091	0.933	0.376	1.225	2.705	0.553	0.091	5.974

Static detector	Species	April	May	June	July	August	September	October	Total
	Leisler's Bat	0	0.045	0.054	0	0.005	0.002	0	0.106
	Myotis Sp.	0.034	0.114	0.135	0.183	0.605	0.251	0.034	1.356
	Nathusius' Pipistrelle	0.013	0.045	0.002	0.014	0.124	0.084	0.013	0.295
	Noctule	0.025	0.137	0.157	0.091	0.443	0.507	0.025	1.385
	Serotine	0.003	0.254	0.304	0.037	0.05	0.014	0.003	0.665
	Soprano Pipistrelle	0.025	0.339	0.085	0.375	0.75	0.129	0.025	1.728
	Total	0.224	1.966	1.148	2.041	4.783	1.579	0.224	11.965
SM4-05	Barbastelle	0.114	0.064	0.554	0.27	0.214	0.295	0.114	1.625
	Brown Long-eared Bat	0.011	0.02	0.004	0.004	0.008	0.015	0.011	0.073
	Common Pipistrelle	2.227	17.897	10.811	14.622	3.01	4.997	2.227	55.791
	Leisler's Bat	0.001	0.008	0	0.018	0.003	0	0.001	0.031
	Myotis Sp.	0.023	0.041	0.059	0.05	0.368	0.096	0.023	0.66
	Nathusius' Pipistrelle	0.062	0.518	0.464	0.047	0.092	0.528	0.062	1.773
	Noctule	0.038	0.502	1.316	0.406	0.228	0.193	0	2.683
	Serotine	0	0.004	0.023	0.812	0.015	0	0	0.854
	Soprano Pipistrelle	0.182	5.256	3.888	1.427	1.103	2.217	0.182	14.255
	Total	2.658	24.31	17.119	17.656	5.041	8.341	2.62	77.745
SM4-06	Barbastelle	0.248	1.708	0.204	0.564	0.812	0.179	0.248	3.963

Static detector	Species	April	May	June	July	August	September	October	Total
	Brown Long-eared Bat	0.003	0.041	0.016	0.018	0.017	0.026	0.003	0.124
	Common Pipistrelle	2.696	29.891	5.65	5.091	13.245	14.388	2.696	73.657
	Leisler's Bat	0	0.004	0	0.008	0	0	0	0.012
	Myotis Sp.	0.281	1.158	0.042	0.07	0.468	0.45	0.281	2.75
	Nathusius' Pipistrelle	0.002	0.054	0	0.016	0.243	0.081	0.002	0.398
	Noctule	0.019	0.287	0.157	0.285	0.466	0.2	0.019	1.433
	Serotine	0.001	0.012	0.007	0.039	0.028	0.009	0.001	0.097
	Soprano Pipistrelle	0.825	17.6	1.269	0.958	1.14	1.144	0.825	23.761
	Total	4.075	50.755	7.345	7.049	16.419	16.477	4.075	106.2
SM4-07	Barbastelle	0.002	0.01	0.114	0.002	0.014	0.127	0.002	0.271
	Brown Long-eared Bat	0.038	0.016	0.445	0.112	0.249	0.25	0.038	1.148
	Common Pipistrelle	0.123	1.62	3.216	1.806	0.591	0.536	0.123	8.015
	Leisler's Bat	0.007	0.004	0.007	0.004	0.007	0.001	0.007	0.037
	Myotis Sp.	0.053	0.183	0.295	1.237	0.457	1.011	0.053	3.289
	Nathusius' Pipistrelle	0.007	0.012	0.033	0.031	0.001	0.087	0.007	0.178
	Noctule	0.044	0.15	0.114	0.197	0.175	0.36	0.044	1.084
	Serotine	0	0.002	0.08	0.05	0.154	0.025	0	0.311
	Soprano Pipistrelle	0.475	2.91	6.89	6.512	1.417	1.909	0.475	20.588

Static detector	Species	April	May	June	July	August	September	October	Total
	Total	0.749	4.907	11.194	9.951	3.065	4.306	0.749	34.921
SM4-08	Barbastelle	0.104	0.325	0.073	0.035	0.082	0.422	0.104	1.145
	Brown Long-eared Bat	0.009	0.029	0.007	0.006	0.008	0.063	0.009	0.131
	Common Pipistrelle	0.345	3.904	0.521	1.216	1.736	2.625	0.345	10.692
	Leisler's Bat	0.001	0	0.002	0.002	0.003	0.002	0.001	0.011
	Myotis Sp.	0.019	0.041	0.097	0.579	0.515	0.117	0.019	1.387
	Nathusius' Pipistrelle	0.001	0.012	0.042	0.008	0.103	0.021	0.001	0.188
	Noctule	0.028	0.039	0.045	0.129	0.478	0.375	0.028	1.122
	Serotine	0	0.002	0.073	0.012	0.036	0.005	0	0.128
	Soprano Pipistrelle	0.392	0.691	0.564	1.35	1.042	3.769	0.392	8.2
	Total	0.899	5.043	1.424	3.337	4.003	7.399	0.899	23.004
SM4-09	Barbastelle	0.255	0.002	0.009	0	0.029	0.021	0.255	0.571
	Brown Long-eared Bat	0.011	0.006	0.002	0.006	0.036	0.031	0.011	0.103
	Common Pipistrelle	0.123	0.885	1.302	0.306	1.077	0.322	0.123	4.138
	Leisler's Bat	0.001	0.027	0.016	0.004	0.01	0.001	0.001	0.06
	Myotis Sp.	0.034	0.104	0.038	0.075	0.326	0.155	0.034	0.766
	Nathusius' Pipistrelle	0.017	0.177	0.111	0.029	0.168	0.114	0.017	0.633
	Noctule	0.003	0.087	0.09	0.079	0.489	0.346	0.003	1.097

Static detector	Species	April	May	June	July	August	September	October	Total
	Serotine	0.008	0.041	0.345	0.056	0.101	0.026	0.008	0.585
	Soprano Pipistrelle	0.298	0.818	0.59	0.264	1.557	0.453	0.298	4.278
	Total	0.75	2.147	2.503	0.819	3.793	1.469	0.75	12.231
SM4-10	Barbastelle	0.143	0.093	0.352	0.133	0.628	2.413	0.143	3.905
	Brown Long-eared Bat	0.023	0.033	0.047	0.014	0.21	0.146	0.023	0.496
	Common Pipistrelle	1.097	1.622	5.066	3.418	1.51	5.54	1.097	19.35
	Leisler's Bat	0	0.002	0.047	0.002	0.056	0.001	0	0.108
	Myotis Sp.	0.127	0.15	0.533	0.308	0.673	0.453	0.127	2.371
	Nathusius' Pipistrelle	0.007	0.004	0.121	0.012	0.364	0.063	0.007	0.578
	Noctule	0.022	0.018	0.654	0.175	1.25	0.495	0.022	2.636
	Serotine	0.003	0.012	0.776	0.077	0.771	0.021	0.003	1.663
	Soprano Pipistrelle	2.844	0.127	0.969	0.893	0.45	6.512	2.844	14.639
	Total	4.266	2.061	8.565	5.032	5.912	15.644	4.266	45.746
SM4-11	Barbastelle	0.137	0.125	0.316	0.379	0.492	1.057	0.137	2.643
	Brown Long-eared Bat	0.013	0.031	0.073	0.047	0.403	0.254	0.013	0.834
	Common Pipistrelle	1.29	3.247	2.673	2.7	3.312	3.709	1.29	18.221
	Leisler's Bat	0.001	0.004	0.026	0.006	0.029	0.001	0.001	0.068
	Myotis Sp.	0.066	0.035	0.037	0.329	0.454	0.265	0.066	1.252

Static detector	Species	April	May	June	July	August	September	October	Total
	Nathusius' Pipistrelle	0.006	0	0.057	0	0.208	0.06	0.006	0.337
	Noctule	0.012	0.141	0.235	0.102	0.901	0.17	0.012	1.573
	Serotine	0.002	0.154	0.342	0.129	0.498	0.002	0.002	1.129
	Soprano Pipistrelle	0.275	0.279	1.561	0.895	2.838	2.419	0.275	8.542
	Total	1.802	4.016	5.32	4.587	9.135	7.937	1.802	34.599
SM4-12	Barbastelle	0.049	0.137	0.157	0.072	0.166	0.264	0.049	0.894
	Brown Long-eared Bat	0.017	0.01	0.033	0.012	0.031	0.086	0.017	0.206
	Common Pipistrelle	6.386	25.679	5.754	9.829	19.912	13.905	6.386	87.851
	Leisler's Bat	0.003	0	0.014	0.014	0.005	0.001	0.003	0.04
	Myotis Sp.	0.067	0.214	0.197	0.062	0.091	0.197	0.067	0.895
	Nathusius' Pipistrelle	0.004	0.014	0.057	0.006	0.036	0.021	0.004	0.142
	Noctule	0.051	0.183	0.295	0.443	0.178	0.176	0.051	1.377
	Serotine	0.014	0.016	0.238	0.064	0.17	0.043	0.014	0.559
	Soprano Pipistrelle	4.641	9.087	2.845	3.202	3.892	12.347	4.641	40.655
	Total	11.232	35.34	9.59	13.704	24.481	27.04	11.232	132.62
SM4-13	Barbastelle	0.048	0.085	0.138	0.016	0.049	0.093	0.048	0.477
	Brown Long-eared Bat	0.006	0.06	0.295	0.125	0.096	0.035	0.006	0.623
	Common Pipistrelle	0.185	0.431	1.964	0.887	1.168	0.118	0.185	4.938

Static detector	Species	April	May	June	July	August	September	October	Total
	Leisler's Bat	0.002	0.004	0.014	0	0.005	0.007	0.002	0.034
	Myotis Sp.	0.325	0.089	0.061	0.11	0.115	0.104	0.325	1.129
	Nathusius' Pipistrelle	0	0	0.03	0.002	0.019	0.022	0	0.073
	Noctule	0.009	0.102	0.242	0.022	0.073	0.009	0.009	0.466
	Serotine	0.003	0.035	0.135	0.047	0.057	0.021	0.003	0.301
	Soprano Pipistrelle	0.066	0.1	0.402	0.239	0.514	0.087	0.066	1.474
	Total	0.644	0.906	3.281	1.448	2.096	0.496	0.644	9.515
SM4-14	Barbastelle	0.06	0.306	0.607	0.285	0.371	0.296	0.061	1.986
	Brown Long-eared Bat	0.003	0.343	0.142	0.143	0.157	0.115	0.003	0.906
	Common Pipistrelle	0.413	20.895	14.138	6.152	11.554	8.358	0.413	61.923
	Leisler's Bat	0	0.01	0.002	0.037	0.052	0.008	0	0.109
	Myotis Sp.	0.093	1.075	0.242	0.187	0.561	0.895	0.093	3.146
	Nathusius' Pipistrelle	0	0.045	0.04	0.01	0.08	0.011	0	0.186
	Noctule	0.011	0.043	0.197	0.214	1.789	0.25	0.011	2.515
	Serotine	0.011	0.045	0.078	1.502	2.11	0.552	0.011	4.309
	Soprano Pipistrelle	0.683	15.445	7.273	5.408	10.519	8.916	0.683	48.927
	Total	1.274	38.207	22.719	13.938	27.193	19.401	1.275	124.01
SM4-15	Barbastelle	0.034	0.733	1.326	0.16	0.028	0.608	0.034	2.923

Static detector	Species	April	May	June	July	August	September	October	Total
	Brown Long-eared Bat	0.007	0.056	0.1	0.031	0.005	0.018	0.007	0.224
	Common Pipistrelle	0.191	1.372	19.135	1.518	1.959	0.423	0.191	24.789
	Leisler's Bat	0.001	0.002	0.061	0	0.007	0.002	0.001	0.074
	Myotis Sp.	0.008	0.081	0.511	0.243	0.384	0.144	0.008	1.379
	Nathusius' Pipistrelle	0	0.002	0.45	0.008	0.061	0.021	0	0.542
	Noctule	0.025	0.12	0.83	0.139	0.815	0.275	0.025	2.229
	Serotine	0	0.022	1.976	0.035	0.326	0.004	0	2.363
	Soprano Pipistrelle	0.325	1.352	4.166	2.354	0.68	1.204	0.325	10.406
	Total	0.591	3.74	28.555	4.488	4.265	2.699	0.591	44.929
SM4-16	Barbastelle	0.112	0.643	1.766	0.681	0.275	0.3	0.112	3.889
	Brown Long-eared Bat	0.007	0.012	0.04	0.018	0.142	0.032	0.007	0.258
	Common Pipistrelle	0.274	1.545	1.119	1.841	1.785	0.536	0.274	7.374
	Leisler's Bat	0.001	0.004	0	0.012	0.003	0.001	0.001	0.022
	Myotis Sp.	0.041	0.052	0.102	0.043	0.264	0.076	0.041	0.619
	Nathusius' Pipistrelle	0.013	0.004	0	0.004	0.163	0.035	0.013	0.232
	Noctule	0.062	0.185	0.169	0.395	0.626	0.112	0.062	1.611
	Serotine	0.011	0.02	0.114	0.062	0.385	0.081	0.011	0.684
	Soprano Pipistrelle	0.23	0.964	0.464	2.691	2.24	0.255	0.23	7.074

Static detector	Species	April	May	June	July	August	September	October	Total
	Total	0.751	3.429	3.774	5.747	5.883	1.428	0.751	21.763
SM4-17	Barbastelle	0.17	0.85	0.166	0.108	0.247	0.105	0.17	1.816
	Brown Long-eared Bat	0.012	0.045	0.054	0.016	0.049	0.039	0.012	0.227
	Common Pipistrelle	0.113	8.533	8.43	2.231	10.95	0.591	0.113	30.961
	Leisler's Bat	0	0.014	0.047	0.027	0.047	0.002	0	0.137
	Myotis Sp.	0.16	0.125	0.176	0.179	0.961	0.12	0.16	1.881
	Nathusius' Pipistrelle	0.003	0.2	0.095	0.002	0.25	0.064	0.003	0.617
	Noctule	0.023	0.227	0.395	0.783	1.978	0.314	0.023	3.743
	Serotine	0	0.125	0.692	0.527	0.717	0.084	0	2.145
	Soprano Pipistrelle	0.329	5.662	5.461	0.777	7.354	0.853	0.829	21.265
	Total	0.81	15.781	15.516	4.65	22.553	2.172	1.31	62.792

Glossary and Abbreviations

Term	Definition
CWS	County Wildlife Sites
GW	Gigawatts
HVAC	High Voltage Alternating Current
HVDC	High Voltage Direct Current
IUCN	International Union for Conservation Nature
LNR	Local Nature Reserves
MAGIC	Multi Agency Geographic Information for the Countryside
NNR	National Nature Reserve
PEA	Preliminary Ecological Appraisal
PRF	Potential Roosting Feature
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SBG	Suffolk Bat Group
SBIS	Suffolk Biodiversity Information Services
SPI	Species of Principal Importance
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest
The Proposed Scheme	The term Proposed Scheme will be used when referring to the GB scheme components as a whole and will not include the Dutch components.
The Proposed Onshore Scheme	The term used when referring to the onshore components of the Proposed Scheme.

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National Grid LionLink Limited

Company number 14722364

1-3 Strand

London

WG2N-5EH

United Kingdom

nationalgrid.com/lionlink