Preliminary Environmental Information Report Volume 2

Appendix 8.6 Baseline Report - Hazel Dormouse Survey

LLK1-ARU-REP-ENV-000008_AP8.6

Version 0.0

January 2026

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 surveys 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 Given the scarcity of records for the wider landscape and limited suitability of habitats within the Proposed Onshore Scheme Scoping Boundary (shown in Figure 1-2 of the EIA Scoping Report (Ref 1)) to support hazel dormouse (*Muscardinus avellanaruis*), a targeted sampling approach to dormouse survey was undertaken throughout 2023. This focussed on establishing presence/absence of dormouse populations in the most suitable habitats identified through desk study early in the Proposed Onshore Scheme design phases to inform subsequent refinement. These constitute sizeable woodland areas, approximately 2 hectares (ha) or larger, within or adjacent to the Proposed Onshore Scheme Scoping Boundary, with strong associated habitat connectivity through mature hedgerow networks. Such habitat in proximity to Saxmundham, where the closest and most recent record was from, was included within the sample sites.

1.3 Purpose and scope of this report

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

to:

a. Undertake a review of hazel dormouse records within the Proposed Onshore Scheme Scoping Boundary.
b. Determine the presence or likely absence of hazel dormouse populations in any suitable habitat within the Proposed Onshore Scheme Scoping Boundary.
c. Provide sufficient information to inform an assessment of potential impacts to hazel dormouse as a result of the Proposed Onshore Scheme.

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**, **Appendix 4.1 Legislation and Policy Register**.

1.4.2 Specific guidance relevant to the assessment for ecology and biodiversity including defining the baseline is set out in **Chapter 8 Ecology and Biodiversity** and includes Chartered Institute of Ecology and Environmental Management (CIEEM) (2024). *Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine*. Version 1.3 (Ref 2).

1.4.3 Legislation relevant to and discussed within this report is:

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

1.4.4 The hazel dormouse is fully protected by the Conservation of Habitats and Species Regulations 2017 (Ref 2) and the Wildlife and Countryside Act 1981 (Ref 3).

1.4.5 Under Regulation 43 of the Conservation of Habitats and Species Regulations 2017 (Ref 5), it is illegal to:

a. deliberately capture, injure or kill a hazel dormouse,
b. possess or control any live or dead specimen or anything derived from a hazel dormouse,
c. deliberately disturb a hazel dormouse (in particular, disturbance which is likely to impair their ability to survive, to breed or reproduce, or to rear or nurture their young, to hibernate or migrate or to significantly affect the local distribution or abundance of the species to which they belong),
d. damage or destroy a breeding site or resting place of a hazel dormouse, or
e. possess, transport, advertise, sell or exchange a hazel dormouse (dead or alive) or any part of a dormouse.

1.4.6 Under Schedule 5 of the Wildlife and Countryside Act 1981 (Ref 6) it is illegal to:

a. intentionally kill, injure or take a hazel dormouse,
b. possess or control any live or dead specimen or anything derived from a hazel dormouse,

c. intentionally or recklessly damage, destroy or obstruct access to any structure or place used for shelter or protection by a hazel dormouse, or
d. intentionally or recklessly disturb a hazel dormouse whilst they are occupying a structure or place used for that purpose.

1.4.7 The UK Biodiversity Action Plan (UKBAP) 1994 – 2010 has been superseded by the UK Post-2010 Biodiversity Framework (Ref 7) covering the period 2011 – 2020. However, UKBAP priority habitats and species have been used to form the basis for the statutory list of habitats and species of 'principal importance for the conservation of biodiversity in England' as listed in accordance with Section 41 of the NERC Act 2006 (Ref 8).

1.4.8 Section 40 of the NERC Act 2006 requires public bodies, including local authorities, 'to have regard to the conservation of biodiversity in England' when carrying out their normal functions. The local planning authority, therefore, must consider the impact on biodiversity of a proposed development. The NERC Act 2006 identifies species of 'principal importance for the conservation of biodiversity in England' (SPI) to guide public bodies in implementing their duty. This priority list includes hazel dormouse. The strategic direction for biodiversity policy for the next decade is set out in Biodiversity 2020: a national strategy for England's wildlife and ecosystem services (Ref 9).

Status of hazel dormouse at national level

1.4.9 Hazel dormice are native to the UK but are nationally rare and vulnerable to extinction, largely due to habitat loss. Although the exact size of the UK population is unknown, there has been a long-term decline in both number of individuals and the geographical range.

1.4.10 The distribution of hazel dormouse is predominantly confined to southern England and southern Wales and is fragmented throughout. However, due to conservation efforts, including hazel dormouse reintroductions, there are isolated populations of dormouse located in the Midlands and north of England. Dormouse monitoring programmes have recently provided an indication that the decline may be slowing, and as part of an ongoing hazel dormouse reintroduction programme the current range is slowly being extended to the north.

Status of hazel dormouse at county level

1.4.11 Suffolk's archived Biodiversity Action Plan (BAP) (Ref 10) of 2003 outlined a series of proposed actions to protect and support dormouse populations in line with national legislation, including the Wildlife and Countryside Act 1981 (Ref 11), the Hedgerows Regulations (1997) (Ref 12), and the UKBAP (Ref 13). These measures aimed to address the primary threats to dormice, which are habitat degradation, fragmentation, and insufficient woodland and hedgerow management.

1.4.12 Key actions from the BAP (2003) included promoting appropriate woodland and hedgerow management practices to prevent habitat fragmentation and ensure

the long-term viability of dormouse populations. Specific focus was placed on incorporating these practices into agri-environment schemes in areas where dormice may be present. Additionally, the BAP highlighted the importance of reinstating hedgerows to reconnect isolated dormouse populations, allowing for greater genetic diversity and increased chances of survival. It also emphasized the need for bodies responsible for woodland management to be aware of dormouse presence prior to any work to avoid inadvertent destruction of their habitats.

1.4.13 Monitoring and surveying efforts were also integral to the BAP's strategy. Twice-yearly monitoring under the National Dormouse Monitoring Scheme at key sites such as Tiger Hill and Priestley Wood was promoted, alongside broader survey work to assess the distribution and habitat fragmentation of dormouse populations in Suffolk. This monitoring helps to track the population trends of dormice and informs conservation actions needed to support them.

1.4.14 Moving forward, Suffolk County Council's Local Nature Recovery Strategy (LNRS) (Ref 14), set to be completed by mid-2025, is expected to further bolster these conservation efforts. A key focus of the LNRS is the creation of Nature Recovery Networks, which aim to connect isolated habitats, promoting species migration and genetic exchange. This approach is critical for the hazel dormouse, as habitat fragmentation is recognised as one of the primary factors contributing to the decline of this species in the county.

1.5 Hazel dormouse ecology

1.5.1 The hazel dormouse annual cycle commences on emergence from hibernation. Whilst they occasionally arouse between February and March and show some signs of short periods of activity between March and April, hazel dormice become fully active between April and May. They will breed between May and June, with a first litter being born between June and July, and an occasional second brood between August and September. Hazel dormice start preparing for hibernation in September, where they will feed to increase their body weight. From November onwards, they will start creating hibernation nests on the ground, within coppice stools, log piles or leaf litter (Ref 15).

1.5.2 As they are arboreal, hazel dormice are reluctant to cross open ground and rely on interconnected habitat (tree/shrub canopy) to travel. Suitable hazel dormouse habitat includes deciduous woodland with a dense understory (particularly managed coppiced woodland), oak (*Quercus spp.*) woodland with hazel (*Corylus avellana*) (e.g. derelict coppice), dense scrub habitat, hedgerow, and occasionally conifer woodland/plantation (Ref 16)(Ref 17). As sequential, specialist feeders, they rely on food diversity within their home range, which typically comprises of nectar, pollen, seeds, fruit, nuts and invertebrates. Male dormice are known to range typically up to 0.75ha, whereas the females have a slightly smaller range (Ref 18).

1.5.3 The population of hazel dormice across the UK has significantly declined in recent years; data from the People's Trust for Endangered Species (PTES) shows a population decline of 70% since 2000 (Ref 19), although this decline may be slowing. The decline has been attributed to inappropriate management and fragmentation of woodlands and hedgerows, as well as variable climate impacting hibernation and breeding success.

2 Methodology

2.1 Desk study

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 included a search for records of hazel dormouse 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 proposed Landfall Site at Walberswick and the associated proposed Underground Cable Corridor only (i.e. excluding the proposed Landfall Site at Southwold and the associated proposed Underground Cable Corridor that have been discounted since EIA Scoping, refer to **Chapter 3 Alternatives and Design Evolution**).

2.1.1 Existing survey information was reviewed from the Sea Link project, which has an overlapping project boundary covering the area east of Saxmundham, encapsulating the proposed Converter Station, Kiln Lane Substation and the proposed Underground HVAC Cable Corridor.

2.1.2 A review of existing literature including the People's Trust for Endangered Species Hazel Dormouse Reintroduction Sites Report (2019) (Ref 20) has been carried out to provide additional relevant information on local populations of hazel dormouse.

2.1.3 Additionally, a review of Ordnance Survey and online aerial mapping resources was completed to identify suitable woodland areas for survey within the Proposed Onshore Scheme Scoping Boundary. Sizeable woodlands of approximately 2ha or larger with appropriate habitat connectivity, such as mature hedgerow networks, were identified and selected as suitable sample sites and comprised the survey area. These map resources were also used to gauge habitat suitability within the wider landscape and potential connectivity to habitats within the Proposed Onshore Scheme Scoping Boundary.

2.1.4 Following the steps above, the desk study identified ten areas that would be most likely to support hazel dormouse populations if they occurred anywhere within the Proposed Onshore Draft Order Limits.

2.2 Field study

2.2.1 Ten sites were selected as being potentially suitable areas for hazel dormouse, land access permission was granted for six of these sites. The six survey sites provide good representation of the most suitable habitat types present for hazel dormouse across the Proposed Onshore Scheme.

2.2.2 Footprint tunnels offer a non-intrusive method of establishing the presence or assumed absence of hazel dormouse. They are constructed from plastic down pipe, with dimensions typically around 40cm in length, 6cm in width, and 6cm in height. The entrance to the tunnels require a small diameter to allow hazel dormice to enter, whilst minimising the intrusion of larger animals. Inside the tunnels, non-toxic ink pads and card sheets are placed to capture the footprints of any animals that pass through. As hazel dormice have distinctive footprints, they can be distinguished from those of other small mammals, with clear ink imprints of footprints on the card inserts. In order to maximise the probability of detection, 50 tunnels were installed at each site and checks were undertaken every two weeks from the date of installation for three months. This results in an overall detection probability of 95% confidence (Ref 21).

2.2.3 All surveys were conducted in accordance guidance published by PTES (Ref 22), with footprint tunnels deployed at intervals of 10-20 meters along transects within suitable habitat. Tunnels were positioned along suitable horizontal branches within hedgerows, scrub and/or trees and secured using cable ties. Each tunnel was labelled with a unique identifier, and its GPS coordinates recorded.

2.2.4 Monitoring the tunnels involved regular biweekly checks during the active season for hazel dormice, which typically range from May to October. During these checks, the card and ink pads were removed and inspected for footprints, with particular attention to identifying hazel dormouse prints, although other small mammals like voles and shrews may also leave traces. The presence or absence of all species footprints were recorded for each tunnel. Fresh sheets of card were replaced when required and the ink pads were replenished after each visit to ensure continued effectiveness of the monitoring.

2.3 Survey limitations

2.3.1 Four of sampling sites on the initial long list for survey were discounted due to land access constraints. The number of sites where the survey was undertaken is considered to be sufficient to assess whether dormouse populations are likely to occur within the Proposed Onshore Scheme Scoping Boundary.

2.3.2 While footprint tunnels are a valuable tool for detecting the presence of hazel dormice, there are certain limitations associated with this survey method. One consideration is the potential for non-target species interference, as footprint tunnels are also accessible to other small mammals such as voles, shrews, and mice. These species can leave footprints that resemble those of the hazel dormouse, which may occasionally lead to challenges in distinguishing between them. However, in this survey, non-target species activity was minimal, and there was no significant interference that would have compromised the accurate identification of hazel dormouse footprints.

2.3.3 Weather conditions, such as heavy rain or strong winds, can sometimes disrupt the ink pads or displace tunnels, potentially affecting the quality or presence of footprints. Additionally, high temperatures can cause the ink pads to dry out between site visits, reducing the effectiveness of the method. Furthermore, in areas with dense vegetation or uneven terrain, it can be challenging to securely place the tunnels, which may lead to inconsistent data collection. In this survey, while weather fluctuations and challenging terrain were encountered, measures such as re-inking more frequently and adjusting tunnel placements were implemented to mitigate these issues, ensuring the consistency of data collection.

3 Results

3.1 Desk study

3.1.1 Hazel dormouse is present within Suffolk, both as native and reintroduced populations, but are limited in distribution to a small number of woodlands, almost exclusively at the southern extent of the county, over 30km from the Proposed Onshore Scheme Scoping Boundary. Suffolk Wildlife Trust in 2020 reported that populations are now declining at most sites in Suffolk (Ref 23).

3.1.2 Thirty-five dormice were reintroduced to Priestly Wood (approximately 32km from the Proposed Onshore Scheme Scoping Boundary) in 2000, and the population was recorded as being stable and having spread to the connected Bonny Wood (approximately 33km from the proposed Onshore Scheme Scoping Boundary). A second reintroduction to Bradfield Woods, near Bury St Edmunds (approximately 46km from the proposed Onshore Scheme Scoping Boundary), took place in 2006. The population in Bradfield Woods was considered stable in 2011-2015, and dispersing (Ref 21).

3.1.3 The SBIS data search returned a single record of dormouse from 2017. This was found in proximity to Saxmundham, approximately 950m west of the Proposed Onshore Scheme Scoping Boundary. This record was of a dormouse nest in a tube, recorded by a PTES volunteer and verified by PTES. In response to the existence of this record, a dormouse survey was undertaken as part of the Sizewell C development project. The survey was undertaken of suitable habitat near Farnham in 2021 and the results found no evidence of dormice (Ref 24).

3.1.4 With reference to Preliminary Ecological Appraisal (PEA) surveys undertaken for the Proposed Onshore Scheme and the review of Ordnance Survey and online aerial mapping resources, the Proposed Onshore Scheme Scoping Boundary and surrounding land generally offers limited suitability to support hazel dormouse. A large proportion of land is dedicated to agriculture, in addition to large areas of mudflat, saltmarsh, and heathland habitat. Where areas of scrub and ancient woodland are present, they are limited in extent and connectivity.

3.2 Field study

3.2.1 The description of each survey area is provided below. The numbering of each area is based on the original long list of 10 potentially suitable areas for hazel dormouse as shown in **Annex A: Hazel Dormouse Survey Areas Location Plan**. Potentially suitable areas that were not surveyed due to access constraints (see **paragraph 2.3.1**) were assigned area numbers, however they are not included within the descriptions below, hence the numbering of survey areas is non-sequential. The six areas that were surveyed are shown in **Annex B: Hazel Dormouse Survey Set up Plan**.

Habitat descriptions of survey areas

Survey area 1

3.2.2 Survey area 1 located to the north-east of Sternfield, by Hill Farm, centred on OS grid reference TM39746196. This survey area is comprised of small woodland parcels connected by a dense hedgerow network. The woodland parcels were dominated by hazel and field maple (*Acer campestre)* standards, with evidence of recent management observed through coppice stools. Likewise, the species-rich hedgerows, were dominated blackthorn (*Prunus spinosa)*, hawthorn (*Crataegus monogyn)*, and elder (*Sambucus nigra*), with some sections featuring bramble (*Rubus fruticosus agg.*) undergrowth.

3.2.3 Footprint tunnels were largely positioned along the hedgerow network and along the woodland and field boundaries.

Inset 3.1: Representative habitats in survey area 1

Survey area 3

3.2.4 Survey area 3 is located within Theberton Woods, which are west of Theberton, centred on OS grid reference TM42316543. This survey area is comprised entirely of woodland. The area is characterised by a varied age structure, including mature trees (large oaks and hornbeams (*Carpinus betulus*)), with signs of regenerating hazel, and a dense scrub undergrowth. Signs of previous and recent management were observed through coppicing and clearance along pathways and tracks, allowing for regeneration of oak and hawthorn.

3.2.5 Footprint tunnels were positioned in a transect line to the northern sections of the woodland, with fuller coverage achieved in the eastern blocks through a grid pattern deployment.

Inset 3.2: Representative habitats in survey area 3

Survey area 4

3.2.6 Survey area 4 is by Minsmere River and Darsham Marshes Nature Reserve, centred on OS grid reference TM42506862. This survey area is comprised of small woodland parcels connected by a network of dense hedgerows. The area is characterised by a mixture of small woodland blocks comprised of alder (*Alnus glutinosa*), poplar (*Populus spp.*) and hawthorn, and edge habitats, with a focus on areas near water bodies, field boundaries, and dense bramble thickets.

3.2.7 Footprint tunnels were largely positioned along the hedgerow network and along the woodland and field boundaries.

Inset 3.3: Representative habitats in survey area 4

Survey area 5

3.2.8 Survey area 5 is located within the Wilderness Woodland to the south-east of Darsham, centred on OS grid reference TM42766960. This survey area is comprised entirely of woodland. Suitable habitat observed in this area includes mature woodland comprised of field maple, oak and hornbeam, with dense scrub areas dominated by rose and bramble scrub. Some evidence of active management and clearance of pathways observed throughout the woodland. The area is surrounded by predominately agricultural land; however, it is connected to wider woodland areas via a hedgerow network.

3.2.9 Footprint tunnels were deployed using a grid pattern where suitable, as well as along the woodland and field boundary.

Inset 3.4: Representative habitats in survey area 5

Survey area 7

3.2.10 Survey area 7 is located within the Minsermere to Walberswick designated sites (Ramsar, SPA, SAC and SSSI), centred on OS grid reference TM42766960. This survey area is comprised of two woodland parcels connected through a network of hedgerows. Suitable habitat observed in this survey area includes a mixture of woodland dominated by mature oak trees, silver birch (*Betula pendula*) and elm (*Betula pendula*), with a dense understory of bramble and gorse (*Ulex europaeus*) thickets, and areas with significant undergrowth, including bracken and honeysuckle (*Lonicera periclymenum)*.

3.2.11 Footprint tunnels were predominately deployed on along the woodland and scrub boundaries.

Inset 3.5: Representative habitats in survey area 7

Survey area 10

3.2.12 Survey area 10 is located adjacent to Reydon Wood to the east of Wangford, centred on OS grid reference TM47877928. The survey area comprises woodland and species rich hedgerows along the arable field boundaries. The woodland was comprised of large trees such as oak, poplar, and ash (*Fraxinus excelsior*). Whereas the hedgerows were dominated by ivy and interspersed with hawthorn and blackthorn.

3.2.13 Footprint tunnels were largely positioned along the hedgerow network and along the woodland and field boundaries.

Inset 3.6: Representative habitats in survey area 10

3.2.14 The dates of surveys undertaken at each survey area are provided in **Table 3.1**.

Table 3.1: Details of survey dates completed at each survey area

Survey area	Deployment completion date	Visit 1	Visit 2	Visit 3	Visit 4	Visit 5	Visit 6
1	01/08/2023	24/08/2023	07/09/2023	21/09/2023	05/10/2023	19/10/2023	31/10/2023
3	14/07/2023	28/07/2023	10/08/2023	25/08/2023	08/09/2023	22/09/2023	06/10/2023
4	02/08/2023	23/08/2023	06/09/2023	20/09/2023	04/10/2023	18/10/2023	31/10/2023
5	12/07/2023	27/07/2023	11/08/2023	25/08/2023	08/09/2023	22/09/2023	06/10/2023
7	03/08/2023	22/08/2023	05/09/2023	19/09/2023	03/10/2023	17/10/2023	30/10/2023
10	04/08/2023	21/08/2023	04/09/2023	18/09/2023	02/10/2023	16/10/2023	30/10/2023

Results

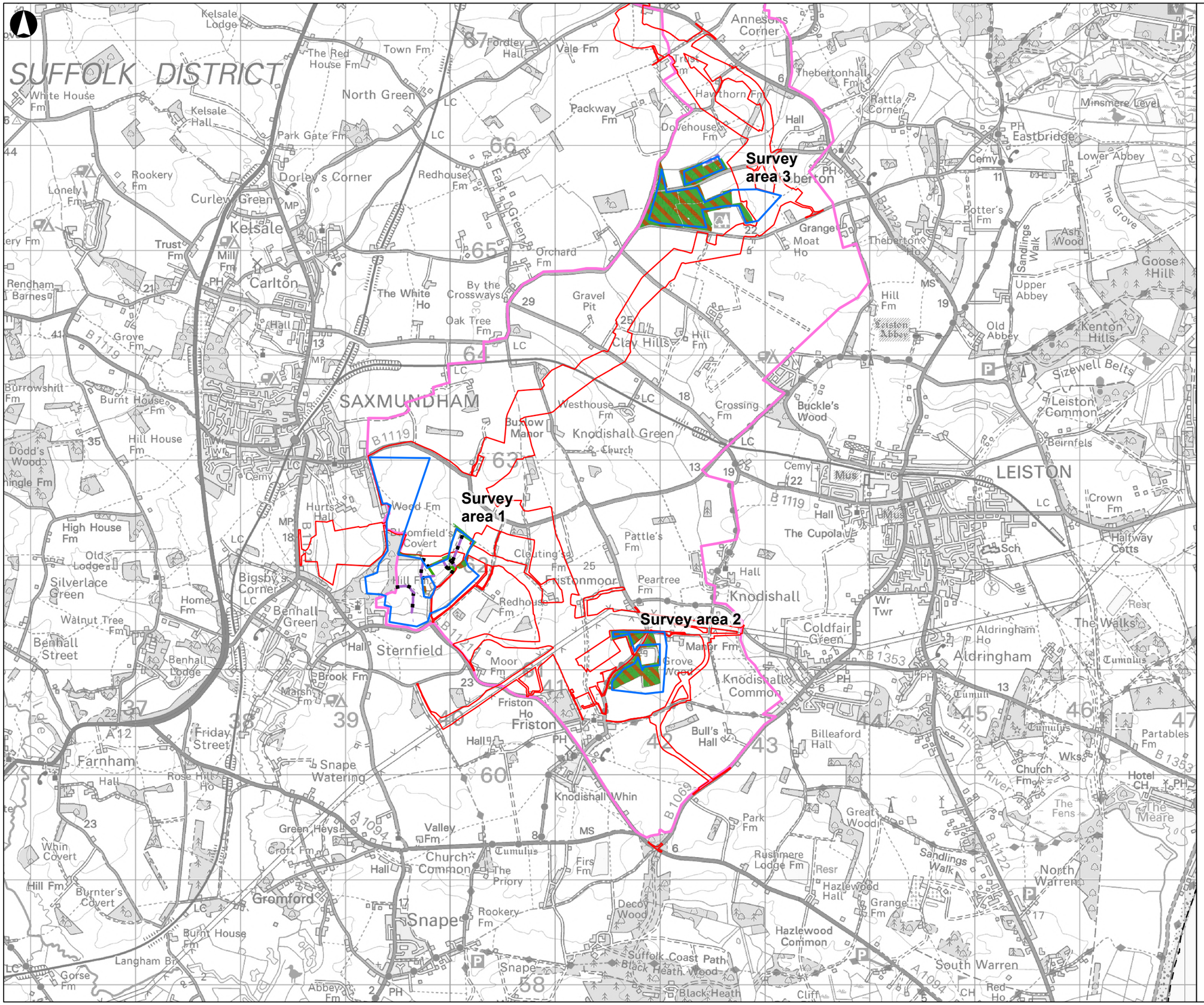
3.2.15 No hazel dormouse or evidence of hazel dormouse were identified during any of the surveys.

4 Conclusions

4.1.1 The presence/absence surveys conducted across six sites in 2023 with habitats deemed highly suitable for dormice, have confirmed the likely absence of dormouse populations within the Proposed Onshore Scheme Scoping Boundary. Despite thorough deployment of footprint tunnels in areas with optimal dormouse habitats (such as mature woodland edges, dense bramble thickets, and field boundaries with rich undergrowth) no evidence of dormice was detected.

4.1.2 These findings, when considered alongside the results from a comprehensive desk study, indicate that hazel dormouse populations are absent from the surveyed areas. Given the lack of dormouse populations within the most suitable habitats locally, it is considered highly unlikely that colonisation of habitats within the Proposed Onshore Scheme Scoping Boundary by dormice will occur prior to construction of the Proposed Onshore Scheme (assuming no reintroductions occur). Consequently, no further hazel dormouse surveys are deemed necessary, as there is considered to be no risk of impacts to this species.

Annex A: Hazel Dormouse Survey Areas Location Plan



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Kilometres

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02	26/09/2025	AW	JM	LC	LC

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Client

National Grid LionLink Limited (NGLLL)

Project Name

LIONLINK

Drawing Title

Location plan of potentially suitable areas for hazel dormouse

Sheet 1

Scale at A3

1:35,000

Role

Hazel Dormouse Report

Suitability

For Information

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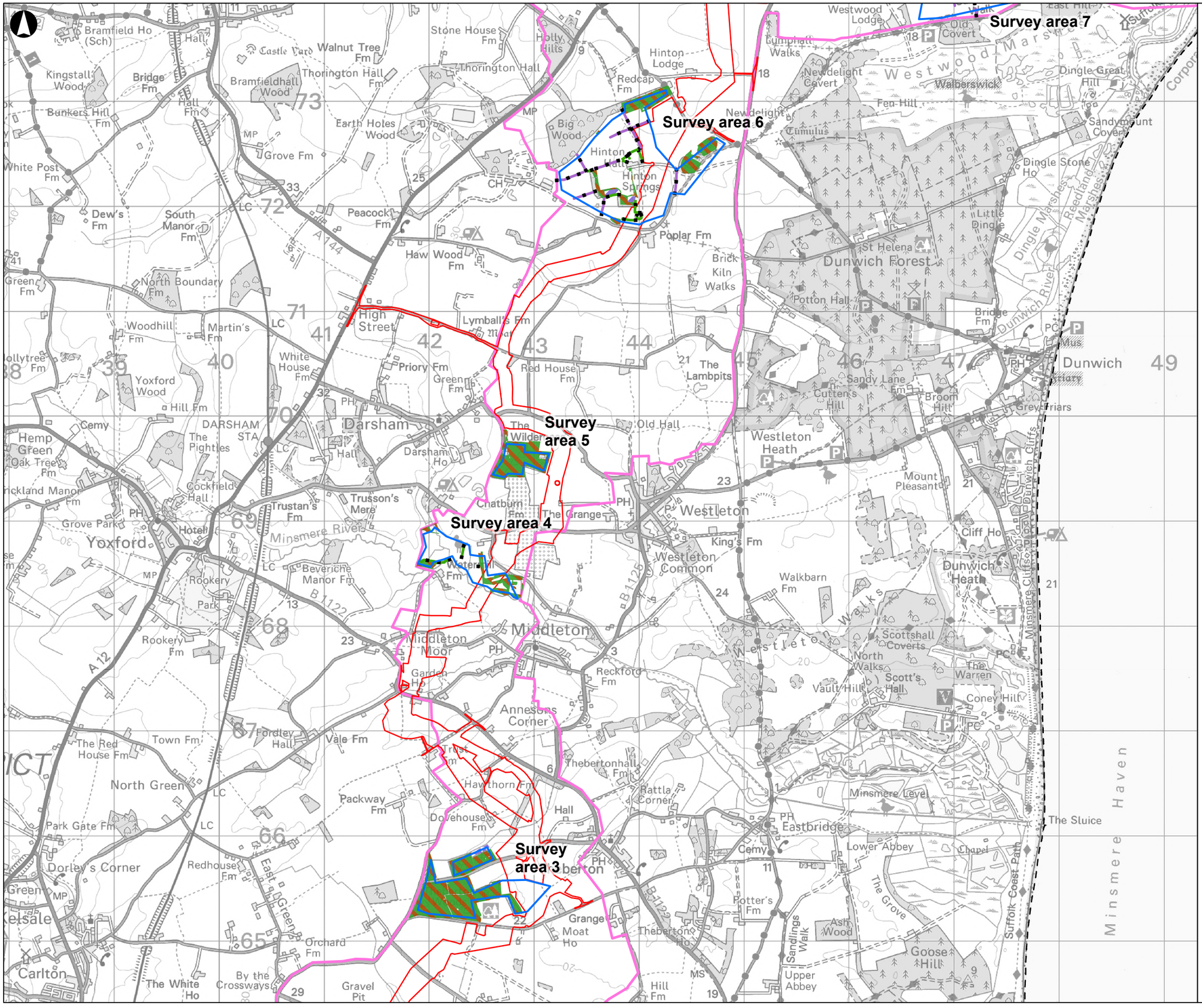

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Drawing Title

Location plan of potentially suitable areas for hazel dormouse

Sheet 2

Scale at A3

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Role

Hazel Dormouse Report

Suitability

For Information

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Drawing Number

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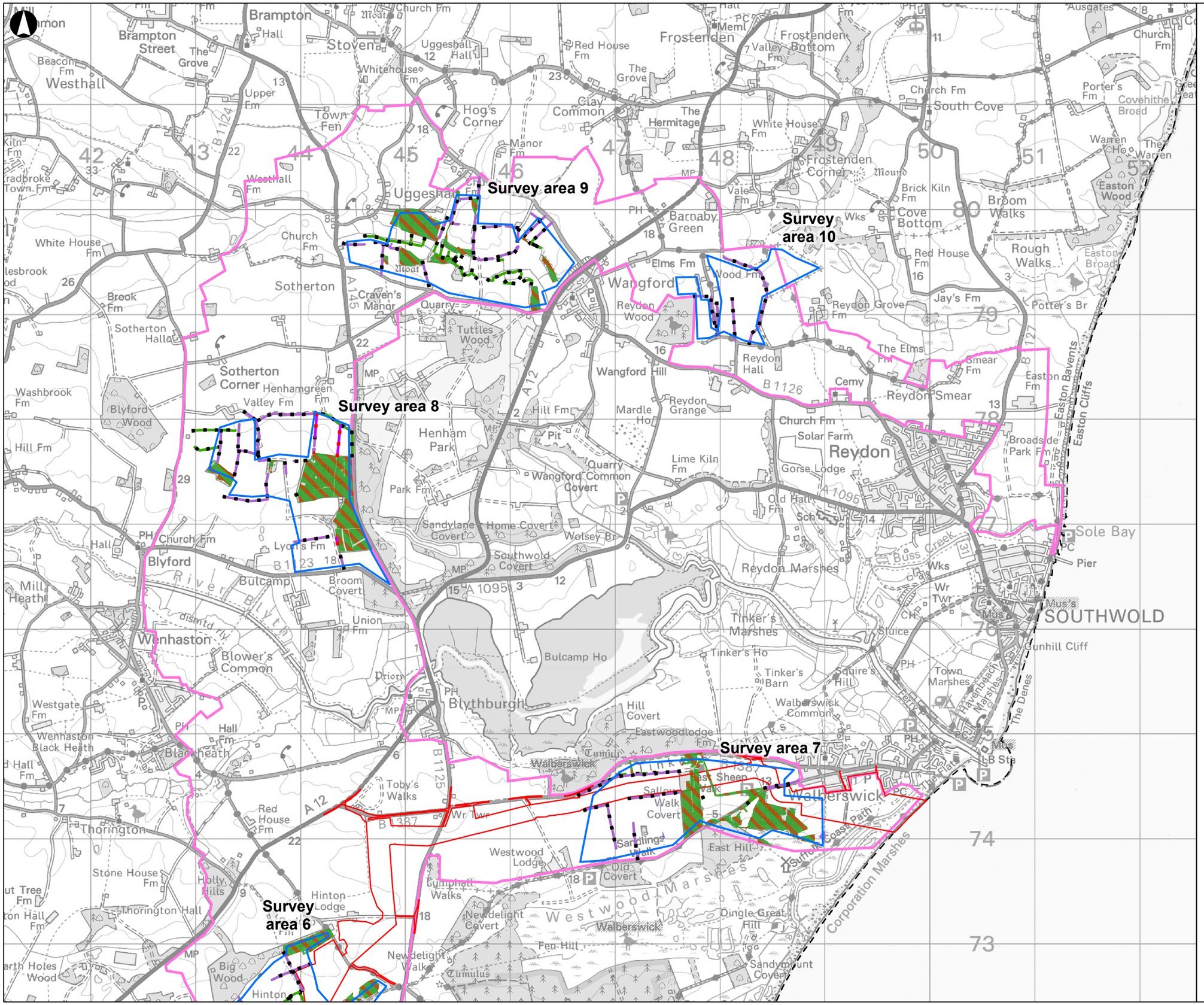

Potentially suitable areas for hazel dormouse

Hedgerow

Scrub

Woodland

Scrub

Woodland

Proposed Onshore Scheme Draft Order Limits

Mean Low Water Springs

Proposed Onshore Scheme Scoping Boundary

Coordinate System: British National Grid

Kilometres

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Sheet 3

Scale at A3

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Role

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For Information

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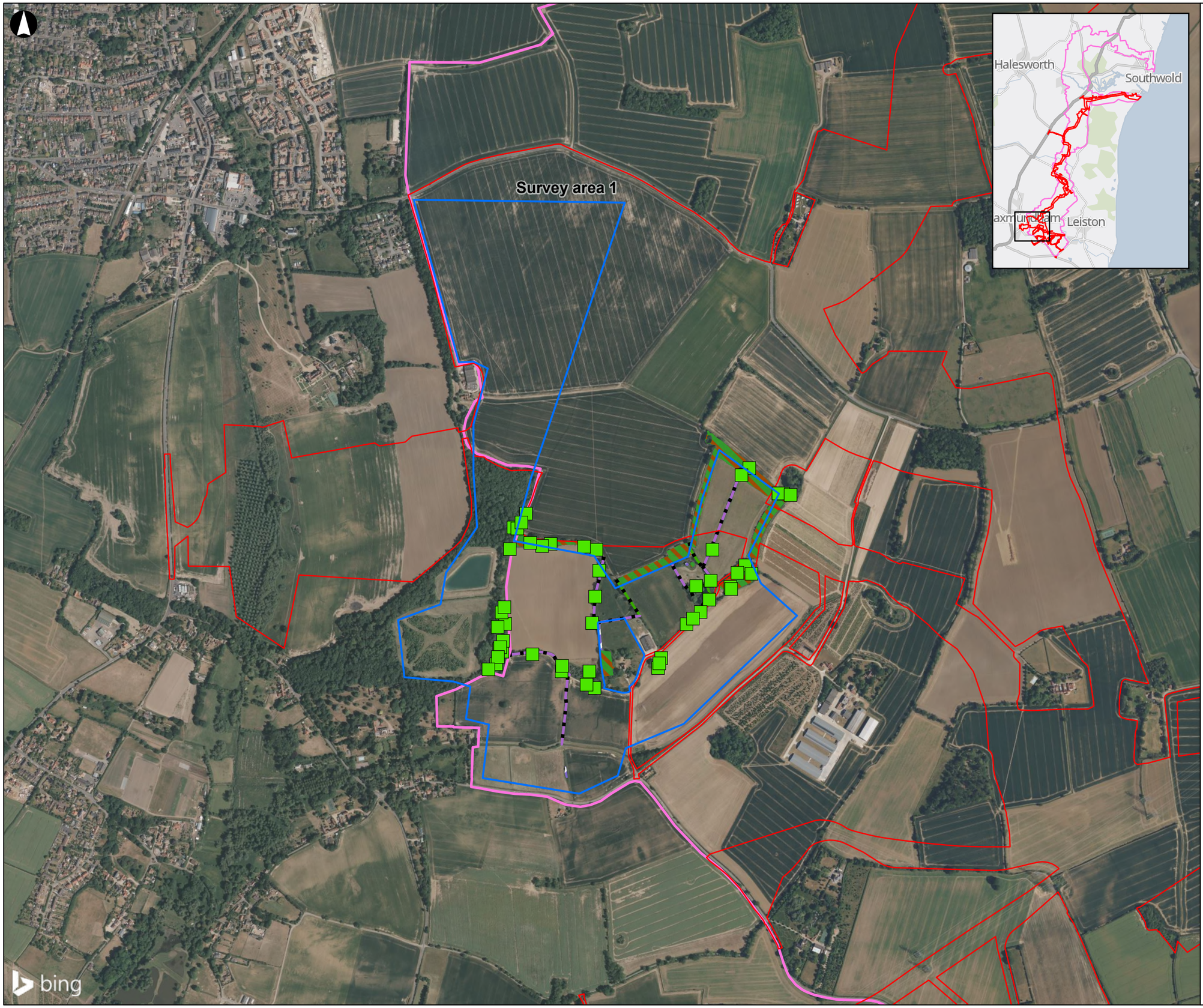
Annex B: Hazel Dormouse Survey Set up Plan



Dormouse Footprint Tunnel Set-Up
Dormice Survey Sites
Hedgerow
Scrub
Woodland
Scrub
Woodland
Proposed Onshore Scheme Draft Order Limits
Proposed Onshore Scheme Scoping Boundary

Coordinate System: British National Grid

Metres
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Drawing Title
Hazel Dormouse Survey Set Up Plan

Sheet 1 of 6

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Role
Hazel Dormouse Report

Suitability
For Information

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Dormouse Footprint Tunnel Set-Up
Dormice Survey Sites
Hedgerow
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Woodland
Scrub
Woodland
Proposed Onshore Scheme Draft Order Limits
Proposed Onshore Scheme Scoping Boundary

Coordinate System: British National Grid

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Hazel Dormouse Survey Set Up Plan

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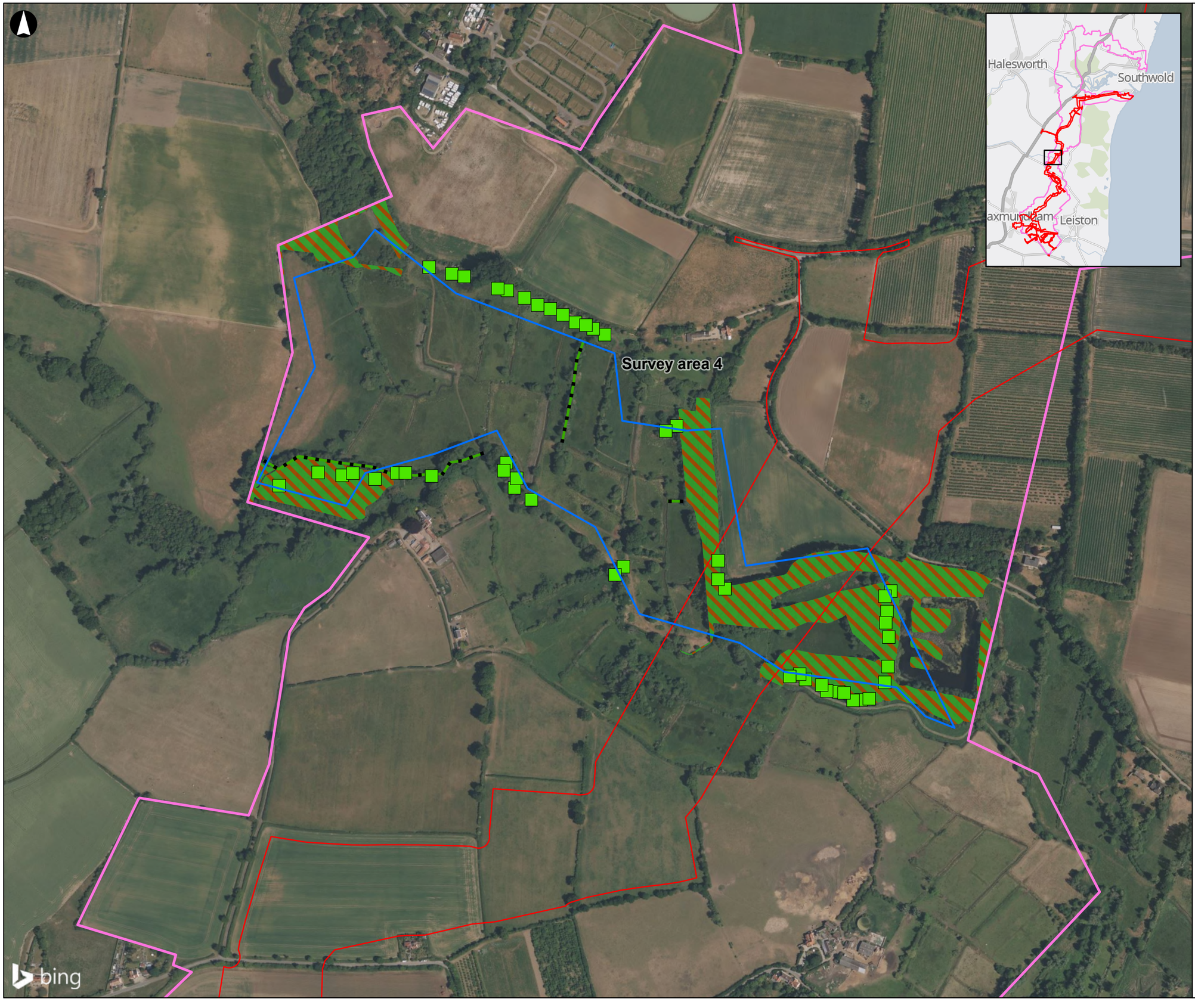

Dormouse Footprint Tunnel Set-Up
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LIONLINK

Drawing Title
Hazel Dormouse Survey Set Up Plan

Sheet 3 of 6

Scale at A3
1:5,000

Role
Hazel Dormouse Report

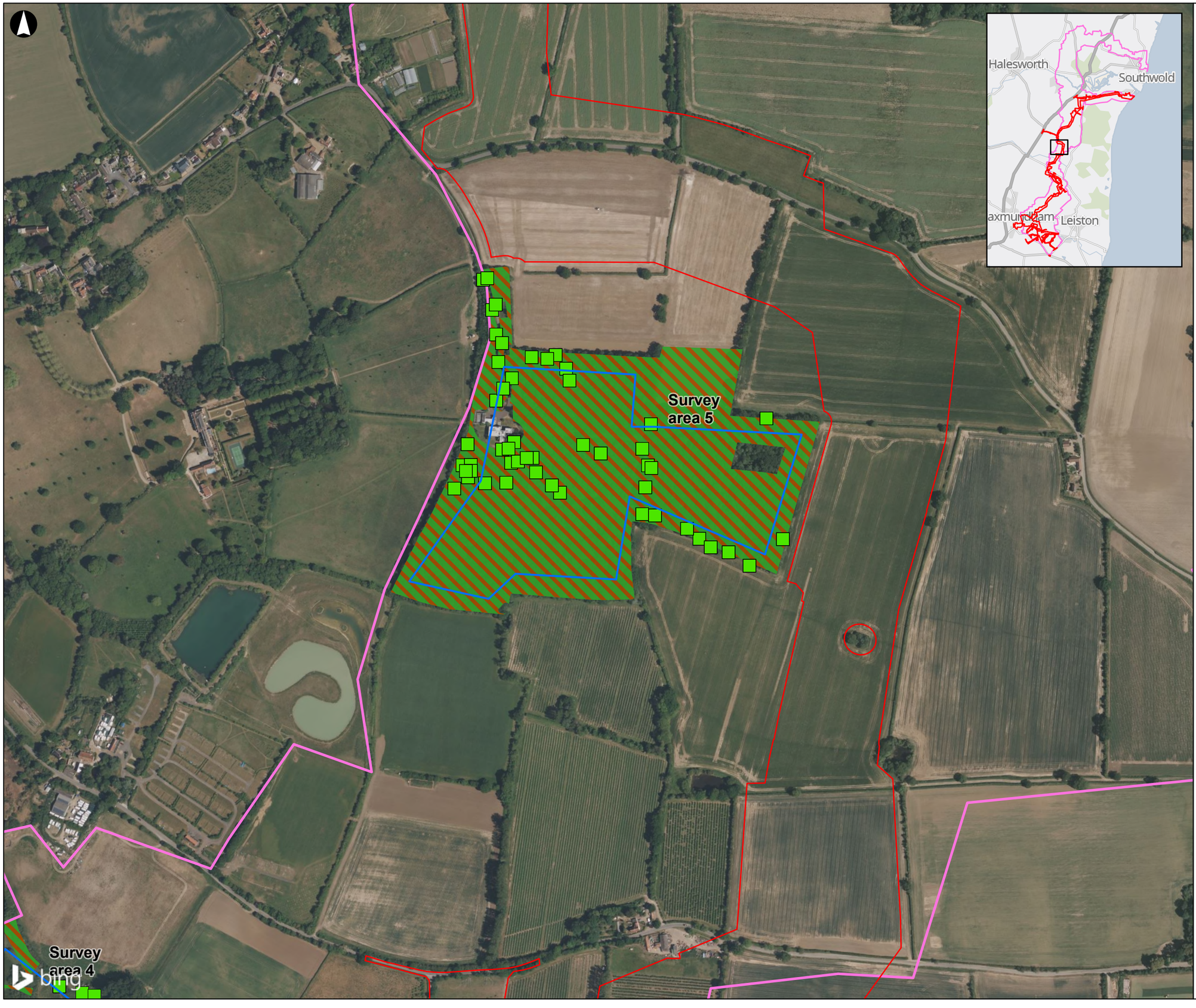
Suitability
For Information

Project Number
287334-00

Rev
02

Drawing Number
LL-ARP-FIG-ENV-0142-P01

A3



- Dormouse Footprint Tunnel Set-Up
- Dormice Survey Sites
- Hedgerow
- Scrub
- Woodland
- Scrub
- Woodland
- Proposed Onshore Scheme Draft Order Limits
- Proposed Onshore Scheme Scoping Boundary

Coordinate System: British National Grid

Metres

0 50 100 200

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

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Sheet 4 of 6

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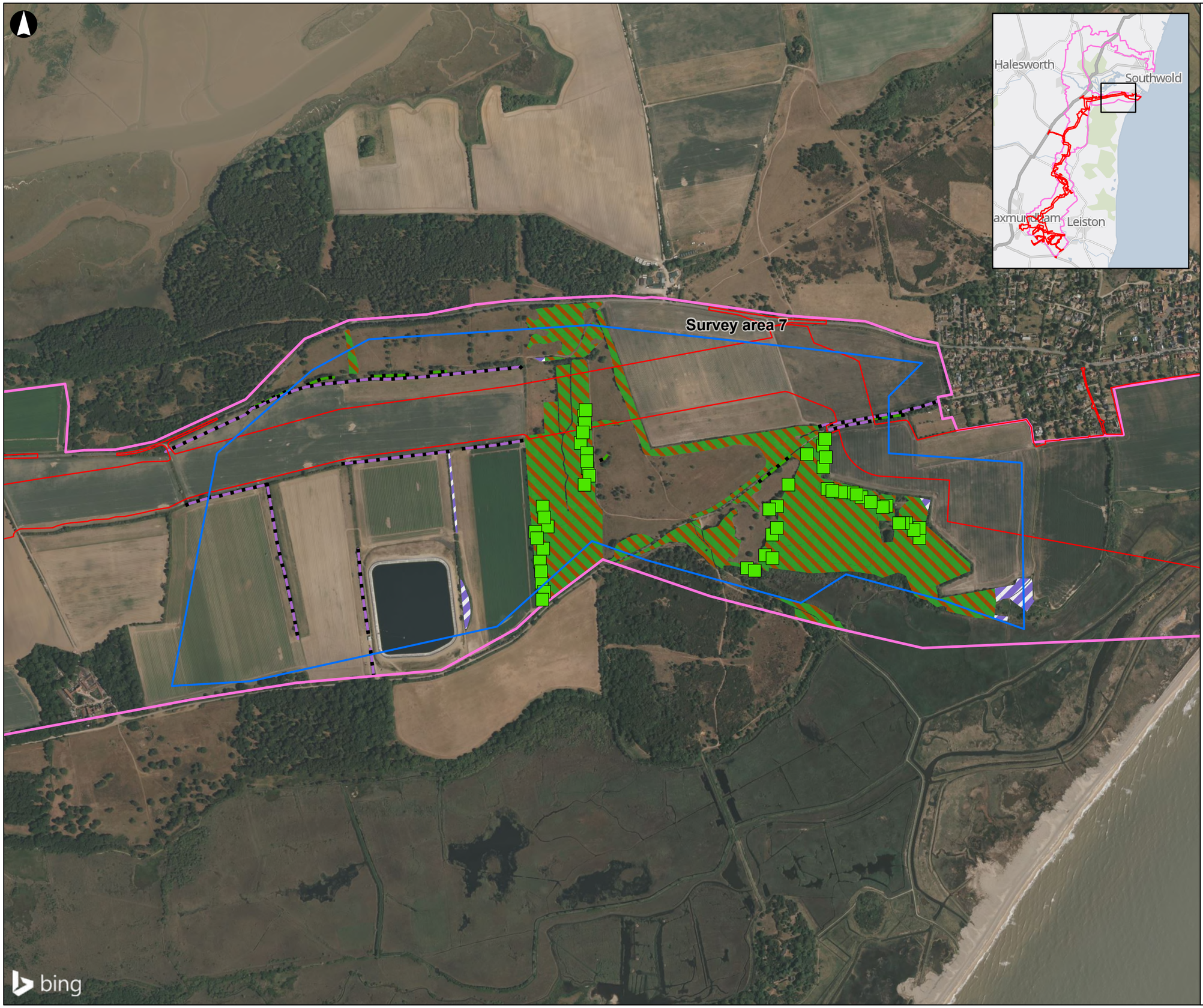

Dormouse Footprint Tunnel Set-Up
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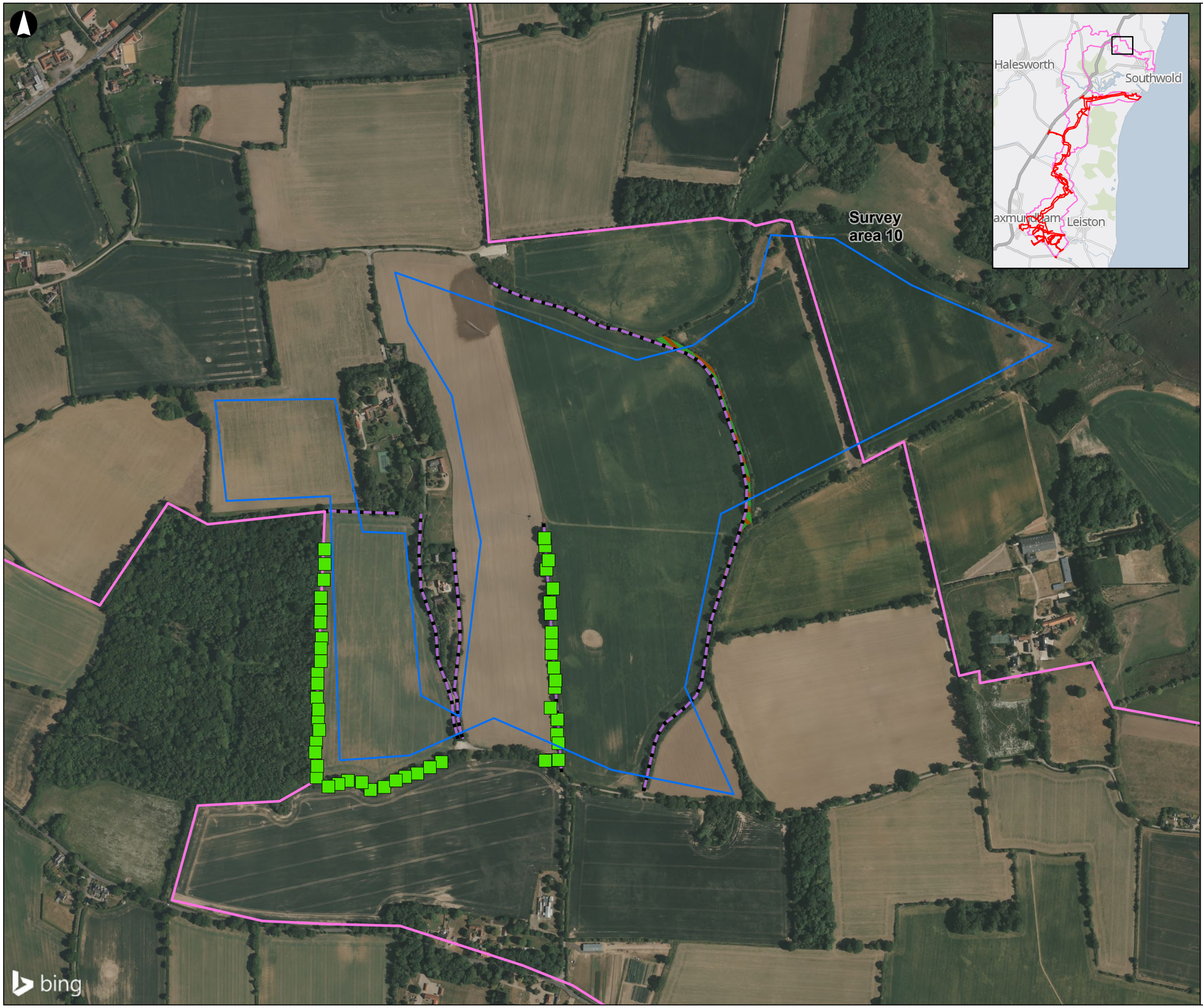

Dormouse Footprint Tunnel Set-Up
Dormice Survey Sites
Hedgerow
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Coordinate System: British National Grid

Metres
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Sheet 6 of 6

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Glossary and Abbreviations

Term	Definition
BAP	Biodiversity Action Plan
CIEEM	Chartered Institute of Ecology and Environmental Management
ESS	Ecology Survey Strategy
GW	Gigawatts
HVAC	Station and Underground High Voltage Alternating Current Cables
HVDC	High Voltage Direct Current Cables
LNRS	Local Nature Recovery Strategy
NERC	Natural Environment and Rural Communities
PTES	People's Trust for Endangered Species
SAC	Special Area of Conservation
SBIS	Suffolk Biodiversity Information Services (SBIS)
SPA	Special Protection Area
SPI	Species of 'principal importance for the conservation of biodiversity in England'
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.

References

Ref 1 National Grid (2024) LionLink Environmental Impact Assessment Scoping Report Volume 1 Main Text. Available at: https://national-infrastructure-consenting.planninginspectorate.gov.uk/projects/EN020033/documents (Accessed May 2025).

Ref 2 (CIEEM) (2024). Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine. Version 1.3, CIEEM, 2024.

Ref 3 The Conservation of Habitats and Species Regulations, 2017. (Online). Available: https://www.legislation.gov.uk/uksi/2017/1012/contents/made (Accessed March 2025).

Ref 4 Wildlife and Countryside Act, 1981. (Online). Available: https://www.legislation.gov.uk/ukpga/1981/69 (Accessed November 2024).

Ref 5 Natural Environment and Rural Communities Act 2006 Chapter 16, Natural England and the Commission for Rural Communities, 2006. (Online). Available: https://www.legislation.gov.uk/ukpga/2006/16/contents (Accessed November 2024).

Ref 6 UK Government (2017). *The Conservation of Habitats and Species Regulations 2017 (Regulation 43)*. Statutory Instrument 2017 No. 1012. HMSO, London, UK.

Ref 7 UK Government (1981). *Wildlife and Countryside Act 1981: Schedule 5*. Chapter 69. HMSO, London, UK.

Ref 8 Joint Nature Conservation Committee (JNCC) (2012). *UK Post-2010 Biodiversity Framework (2011–2020)*. JNCC and Defra, on behalf of the Four Countries' Biodiversity Group. Peterborough, UK.

Ref 9 UK Government (2006). *Natural Environment and Rural Communities Act 2006: Section 41*. Chapter 16. HMSO, London, UK.

Ref 10 Department for Environment, Food and Rural Affairs (Defra) (2011). *Biodiversity 2020: A Strategy for England's Wildlife and Ecosystem Services*. Defra, London, UK.

Ref 11 Suffolk Wildlife Trust. (2003). *Suffolk Biodiversity Action Plan*. Available at: https://www.suffolkwildlifetrust.org (Accessed November 2024).

Ref 12 UK Government (1981). *Wildlife and Countryside Act 1981*. Chapter 69. HMSO, London, UK. Available at: https://www.legislation.gov.uk/ukpga/1981/69 (Accessed November 2024).

Ref 13 UK Government. (1997). *The Hedgerows Regulations 1997*. Available at: https://www.legislation.gov.uk (Accessed November 2024).

Ref 14 Joint Nature Conservation Committee (JNCC). *UK Biodiversity Action Plan*. Available at: https://jncc.gov.uk/our-work/uk-bap/ (Accessed November 2024).

Ref 15 Suffolk County Council. *Local Nature Recovery Strategy*. Available at: https://www.suffolk.gov.uk (Accessed November 2024).

Ref 16 P. Bright, P. Morris and T. Mitchell-Jones, "The dormouse conservation handbook second edition," English Nature, Peterborough, 2006.

Ref 17 P. W. Bright and P. A. Morris, "Ranging and nesting behaviour of the dormouse, Muscardinus avellanarius, in diverse low-growing woodland," *Journal of Zoology,* vol. 224, no. 2, pp. 177-190, 1991

Ref 18 P. W. Bright and P. A. Morris, "Ranging and nesting behaviour of the dormouse Muscardinus avellanarius, in coppice-with-standards woodland," *Journal of Zoology,* vol. 224, no. 2, pp. 589-600, 1992.

Ref 19 R. Mofatt, "People's Trust for Endangered Species," (Online). Available at: https://ptes.org/wp-content/uploads/2017/08/The-Status-of-the-Hazel-Dormouse-in-Warwickshire-in-2016.-July-2017.pdf (Accessed November 2024).

Ref 20 D. Wembridge, I. White, K. Freegard, N. Al-Fulaij, S. Langton, "The State of Britain's Dormice 2023". Available at: https://ptes.org/wp-content/uploads/2023/11/State-of-Britains-Dormice-2023.pdf (Accessed November 2024).

Ref 21 80 White, I. (2019). Hazel Dormouse Reintroduction Sites Report 2019. People's Trust for Endangered Species. Available at: https://ptes.org/wp-content/uploads/2019/07/20190717_Dormouse-Reintroduction-Report-2019.docx.pdf (Accessed November 2024).

Ref 22 Bullion, S., Burrough, K., Chanin, P., Langton, S. & Looser, A. (2021) Detecting hazel dormice *Muscardinus avellanarius* with nest tubes and tracking tunnels: maximising the probability of success. *Mammal Communications* 7: 38-46. DOI: 10.59922/RPGO4459

Ref 23 Bullion & Looser, 2019. Available at https://ptes.org/wp-content/uploads/2020/10/Footprint-Tunnel-Guidance-4.pdf (Accessed November 2024).

Ref 24 Looser, A. (2020). Dormouse Monitoring in Suffolk. Available at: https://www.suffolkwildlifetrust.org/news/dormouse-monitoring-suffolk (Accessed November 2024).

Ref 25 NBB. (2021). The Sizewell C Project: Additional Ecology Survey Reports (September 2021) Part 2 of 2

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