

A358 Taunton to Southfields Dualling Bat Activity surveys Technical Report Appendices A-E

PCF STAGE 2

HE551508-MMSJV-EBD-000-RP-LB-0051

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Appendix A - NERC Act 2006 Schedule 41 bats

Table A:1: Bat species listed under NERC Act 2006 Schedule 41 and their specific species actions

Species	Priority Group	Action Priority	Action
Barbastelle	1 – global concern	High	Ensure species is considered in agri-environment, assisting at a farm scale to ensure hedgerow, small linear wood and field margin creation, persisting in the landscape and maintaining landscape level connectivity and insect biodiversity. Improvements to small farm woodlands and wet meadows, blocking land drains may also encourage retention of trees used for roosting.
			Continuation and expansion of research into more detailed habitat requirements by this species, including the impact of regional differences and management needs.
			Continued monitoring through the National Bat Monitoring Programme (NBMP) to monitor population trends of this species.
			Protect the condition of priority wetland and woodland habitats, to contribute towards provision of sufficient good quality trees for roosting and insect rich foraging grounds. Ensure the protection and preservation of mature woodland and improve the conditions of young woodland specifically for this species.
			Help buffer core woodland areas with the encouragement of woodland expansion, increasing flight-line connectivity between woodland areas and other foraging habitats at a landscape level.
Bechstein's bat	1 – global concern	High	Ensure sufficient roosting and foraging habitats are available through woodland habitat management meeting the requirements of this species, such as encouragement of continuous cover canopy and a well-developed understorey.
			Ensure the protection and monitoring of maternity colonies, hibernation sites and swarming sites, and designation of appropriate woodland and underground sites identified through survey.
			Continuation and expansion of research into more detailed habitat requirements by this species, including the impact of regional differences and management needs.
			Expand woodlands around their core areas, reconnecting fragmented woodlands with treeline and hedgerow planting, to allow recolonisation of previously populated areas and aid seasonal dispersal for mating and hibernating.
		Medium	Provide advice to woodland managers and arboriculturalists regarding the retention of roost trees, and management of areas suitable for foraging. Discouragement of felling and where necessary mitigating through staged felling.
			Wider woodland policy such as requirement for bat surveys and mitigation agreement prior to the granting of felling licences in certain woodland types, identified as having the potential to support Bechstein's bat, has been identified as potentially assisting this species.
			Ensure the improvement and retention of the condition of woodlands. This is also likely to benefit other bat species which roost in trees and woodlands.
	3 – national concern	High	Continued monitoring through NBMP to monitor population trends of this species. In addition to this the recording of roost used by species should be promoted by local bat groups, local

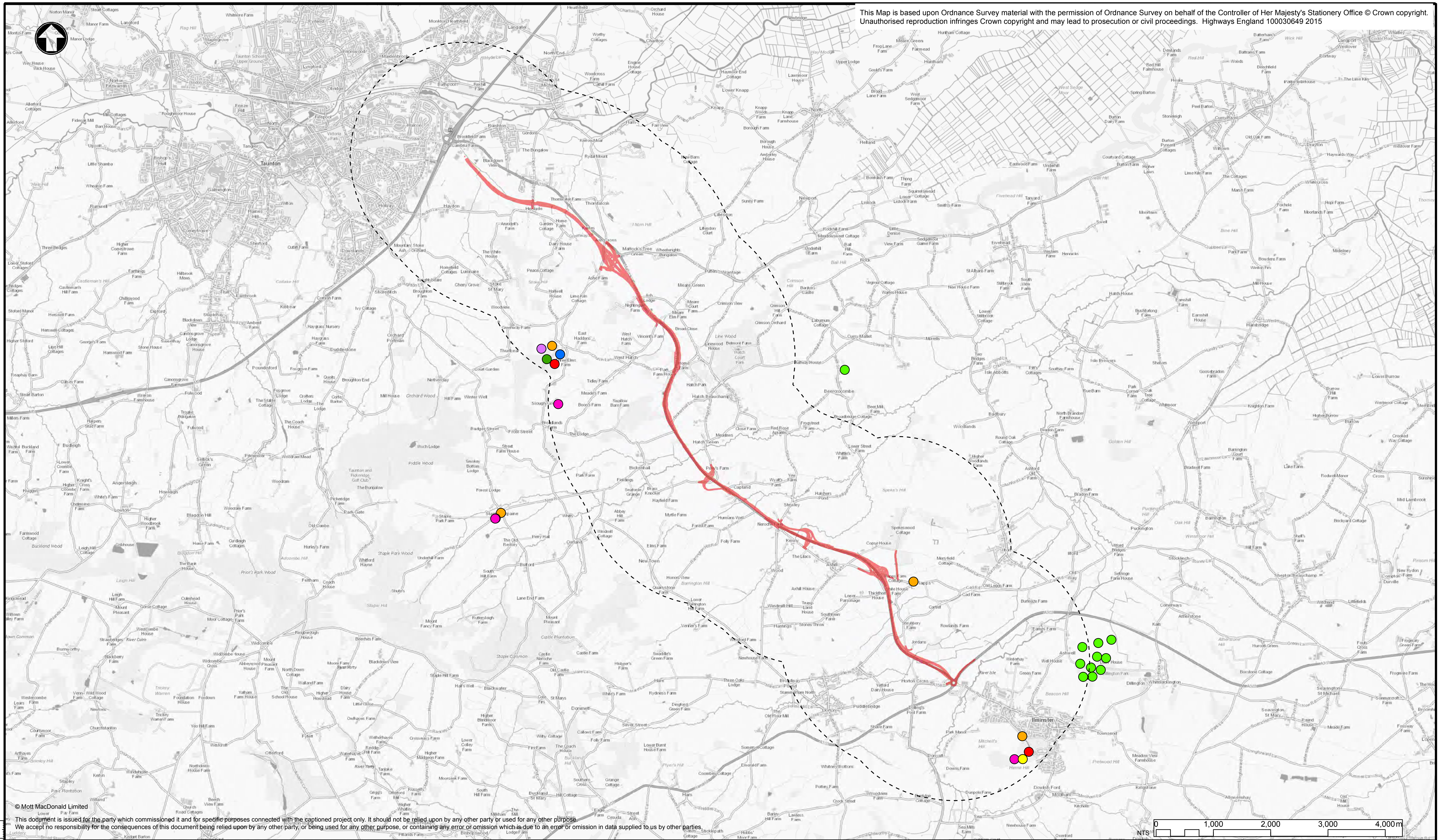
Species	Priority Group	Action Priority	Action
Brown long-eared bat			record centres and consultants through appropriate information sharing, and by species conservation plans.
			The best roosts (identified as those supporting the largest colonies) should be considered for designation as Sites of Special Scientific Interest (SSSIs).
			Critical resources should be protected at landscape level, including all types of roost and important foraging grounds and commuting routes. For this the provision of appropriate landscape features are required, including habitats not classified as UK priority habitats but are important foraging resources and for connectivity.
			Improvement of mitigation in barns and lofts targeting brown long eared bat, by developing designs specifically for this species previously found to be successful (for example incorporation of adequate roof space / use of the correct roofing material to provide an environment with the desired thermal characteristics).
		Medium	Ensure this species is considered in agri-environment schemes and woodland policy, with improvements in farmland, woodland edges, hedgerow, small farm woodlands and mixed woodland. In addition to retaining and protecting older trees for roosts as part of land-use policies.
			Consider the impacts of light pollution on this species.
			Consideration of the effectiveness of different conservation management on brown long-eared bat, with detailed understanding of priority habitats. Better guidance should be produced for land managers particularly on habitat structures and features.
			Improve planning policy in relation to bat roosts in buildings, particularly for this species, reducing levels of exclusion and roost destruction through tighter planning control and legal enforcement. In addition to ensuring building regulations to consider bats which roost in buildings.
			Reducing habitats fragmentation and increasing habitat connectivity between foraging grounds and roosts, particularly between woodlands, tree lines and high hedgerows.
Greater horseshoe bat	2 – European concern	High	Continue with monitoring through the NBMP activity count and hibernation survey. This should focus on male to female ratios within roosts, and consider new colonies will form with small numbers of bats which are often overlooked.
			Continue the protection of designated sites and known roosts (that is, building and underground) notifying local authorities and other relevant bodies of records. Ensuring the management of sites is appropriate to the species needs, with the designation of new sites where appropriate.
			Encouragement of appropriate habitat management particularly within 4km of maternity roosts of woodlands, wood pasture, pasture and connecting hedgerows, with these habitats representing critical foraging areas for pregnant and lactating bats, and their offspring. Landscape suitable for the survival of this species throughout its range should be protected through woodland policy, agri-environment schemes and planning policy in respect to building and underground sites.
		Medium	Research into climate change adjustments in the phenology of invertebrate prey populations and the impact of the decline of these populations, particularly moths, dung beetles cockchafer and tipulids.

Species	Priority Group	Action Priority	Action	
			<p>Ensure advice and good practice information is offered on habitat management and relevant grants schemes.</p> <p>Expand priority habitats used for foraging and commuting, and close to maternity colonise, enhancing these to increase insect prey populations. Increase the extent of suitably managed woodland and connective hedgerows, particularly those linking foraging areas and maternity sites. It should be noted as a landscape species greater horseshoe may use habitats not classified with priority status, so action should not be restricted to priority habitats.</p>	
Lesser horseshoe bat	2 - European concern	High	<p>Research to improve understanding of which priority and non-priority habitats are used by lesser horseshoe bat. This should aim to provide Habitat Groups with suggested targets for increase in area and condition of habitats of importance for this species, considering conservation at a landscape level. This should also contribute towards future success criteria for lesser horseshoe.</p>	
			<p>Maintain monitoring of designated sites and known roosts through the NBMP and provision of records to appropriate authorities.</p>	
			<p>Consideration of this species in planning, woodland and agri-environment policy to protect roosts and retain and create suitable habitat and landscape features throughout the range of this species.</p>	
				<p>Ensure protection of all known roosts via implementation of legislation and policy and implementation of appropriate mitigation and monitoring of effectiveness and compliance.</p>
				<p>Ensure a landscape approach is undertaken when considering the conservation of this species and ensuring that habitat such as woodland foraging habitat, old hedgerows and treelines, and roosting sites are increased and managed appropriately for the needs of lesser horseshoe, improving connectivity between these.</p>
				Medium
Noctule	3 – national concern	High	<p>Avoid conflict with the requirements of H&S policy with regard to mature trees and noctule roosts, through collaborative working between bat workers, H&S inspectors and arboriculturalists.</p>	
			<p>Enhance existing monitoring schemes via the NBMP to provide long term roost population trends. Surveys for roosts throughout the noctule range are also required to better understand the distribution of this species.</p>	
			<p>All roosts must be proactively protected through measures such as accurate recording on local and national schemes and local authority tree records so they are flagged up during planning searches and tree safety routines. Mitigation for loss of roosts needs to be effective to maintain populations. Surveys should also be undertaken before tree-felling, to look for roosts and potential roosts.</p>	

Species	Priority Group	Action Priority	Action
			<p>High flying species such as noctule should be considered in policy relating to wind turbine developments.</p> <p>Ensure that the requirements of this species are considered in woodland, windfarm, agri-environment, water quality, tree protection (including H&S considerations) policy. Older trees should be retained and protected for noctule roosts, with this included in land-use policies (particularly planning and woodland).</p>
		Medium	<p>There should be a focus on woodland and lowland agricultural habitats at the landscape level when considering habitat improvements. Although noctule are a mosaic species, increasing the quality of existing habitats such as insect-rich wetlands may also help noctule.</p> <p>Improve the management of urban, suburban, rural, woodland and riverine landscapes for insect populations and roost protection.</p> <p>Consider how climate change may results in a range shift for noctule in relevant policy.</p> <p>Further research should be conducted into understanding how this species uses priority habitats and what ones are imperative to them, the effects of climate change, and impacts of windfarms. A greater understanding is also required of types of roost used by this species.</p> <p>The designation of woodlands which encompass several tree roosts used by a colony should be considered. Good foraging areas which could be subject to specific action for improvements should also be identified.</p>
Soprano pipistrelle	3 – national concern	High	<p>Ensure the provision of on-going free advice, with this species often roosting in houses, and forming the largest colonies in buildings in the UK. Appropriate advice and support are required to find solutions for people living and using buildings where roost exist to protect this species and manage issues associated with large roosts such as noise and smell.</p> <p>Continuation of population monitoring via field survey and colony count surveys with the NBMP, ensuring on-going national co-ordination, regional training and local volunteer engagement.</p> <p>Ensure the protection of known roosts through the implementation of legislation and policy. Surveys should be undertaken to identify new roosts and advice on proposed works and development should be provided through education and volunteer networks in addition to the private consultancy sector. Proportionate and appropriate mitigation must be implemented where required, accompanied by monitoring of effectiveness and compliance.</p> <p>Undertake research to understand the effectiveness of mitigation proposed on specific management recommendations. This should aim to provide habitat groups with target suggestions to increase the extend and quality of habitat for this species and contribute towards future success criteria for soprano pipistrelle.</p> <p>Promote the improvement, expansions and creation of key habitats for this species, including wetlands, and features such as hedgerows and woodland edges, ensuring the provision of maximal foraging opportunities. The landscape approach to conservation of this species should be considered, with this species using additional habitats to those listed previously and the delivery of conservation actions for soprano pipistrelle only likely to be achieved when considering other habitats.</p>

Species	Priority Group	Action Priority	Action
			Ensure the needs of this species are considered in agri-environment schemes, planning, wetland creation, wind farm and water quality policy. The impacts of climate change on this species should also be considered in policy making, such as how the drying up of wetlands could impact this riparian associated species.
		Medium	Consider designating larger roosts as SSSIs. Consider ensuring the biggest roosts are notified and protected.

Appendix B - Biological records



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Notes
 Pink Modified Scheme, Mott MacDonald (2018)
 Historical Record data, Somerset Environmental Record Centre, (2020)
 Service Layer Credits: Contains OS data © Crown Copyright and database right 2020

Key to symbols		References drawings	
	Pink modified scheme option		Lesser Horseshoe Bat
	2km buffer		Natterer's Bat
Species			Serotine Bat
	Bechstein's Bat		Soprano Pipistrelle Bat
	Brown Long-eared Bat		Whiskered/Brandt's Bat
	Common Pipistrelle Bat		

Drawing Status		Suitable for Stage Approval		Subsidiary		S4		Project Title		A358 Taunton to Southfields	
				Stoneham Place Stoneham Lane Southampton SO50 9NW Tel : +44 (0)23 8062 8800 Fax : +44 (0)23 8062 8801 www.mottmac.com				Drawing Title		Bat historical records	
								Scale	NTS	Designed	ER
Client				Date		08/12/2020		Date		08/12/2020	
Drawing Number		HE551508 - MMSJV		Volume		- EBD -		Project Ref. No.		370774	
Revision		000		Type		- DR - LB - 0135		Revision		P1	

P1	08/12/2020	Suitable for Stage Approval	ER	SM	ER
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

Appendix C - Natural England consultation

Subject Ecology Surveys
To Julia Barrett
From Simon Mason
Our reference Bat Survey Methods
Office Southampton
Date 02.03.2017
Your reference A303 Sparkford to Ilchester & A358 Taunton to Southfields

This memo outlines the proposed bat survey approach for two Highways England Road Improvement Schemes (RIS), A303 Sparkford to Ilchester and A358 Taunton to Southfields. Appendix A provides an outline of these two schemes. The assessment of both of these schemes are being undertaken under a Development Consent Order (DCO), which is currently scheduled to be submitted in 2018. The current stage in the development of both schemes is the Option Selection stage, and as such, several route options are currently under consideration for both schemes.

The aim of this memo is to provide a platform for agreeing an approach to survey, which is acceptable to all parties involved, and which can be included in a Statement of Common Ground to facilitate the DCO application process.

Background

Highways England are currently proposing to undertake a number of major Road Improvement Schemes (RIS) of which the A303 and A358 are two schemes which the Mott MacDonald Sweco Joint Venture (MMS) are currently working on. Other schemes are currently being assessed by other consultancies and have been subject to some initial consultation with Natural England. To ensure a consistent approach is undertaken, MMS are seeking to align the proposed survey effort with the agreed approach with other Highways England RIS Schemes of a similar scale.

WSP/Parsons Brinkerhoff are currently working on the A30 Chiverton to Carland Cross dualling scheme in Cornwall. As part of their survey planning they produced a memo¹ which outlined their proposed approach to undertaking bat surveys to assess the impacts of the scheme. The A30 Chiverton to Carland Cross memo provided an assessment of various survey methods including standard methods outlined within the Bat Conservation Trust 2016 survey guidelines², together with the consideration of methods outlined within recently published research funded by Defra³. This memo was sent to Natural England (NE) on the 13th December 2016. Katherine Walsh, Natural England Senior Specialist Mammals, provided a response to this memo on the 26th January 2017. A copy of this response is included in Appendix B of this memo.

Summary of Natural England's Response to A30 Bat Survey Memo

WSP/Parsons Brinkerhoff (WSP/PB) had proposed to omit the Landscape Scale transects as outlined within the 2015 DEFRA study from the proposed A30 survey approach. However, NE confirmed (having consulted John Altringham)

¹ WSP | Parsons Brinkerhoff 1st September 2016 - A30 Chiverton to Carland Cross Bat Survey Approach, v2

² Collins, J. (ed.) (2016) Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edn). The Bat Conservation Trust, London.

³ Berthinussen & Altringham (2015) 'Development of a cost-effective method for monitoring the effectiveness of mitigation for bats crossing linear transport infrastructure'

that the landscape scale transects were required and important for enabling monitoring of future impacts on the bat population.

'by not including the transect methodology, the proposed survey design does not allow for a methodology that is repeatable i.e. it does not establish a baseline by which the bat population can be assessed. At a landscape scale the proposed survey design will not be able to statistically assess whether bat populations have remained stable, increased, decreased or if bat diversity has been altered to any degree by this scheme. Whilst, the methodology should be suitable for identifying crossing points, it won't provide a baseline by which to effectively measure the success or otherwise of any mitigation.'

Natural England's response confirmed that they are happy with WSP/PB's approach to standard roost and activity surveys which are based on the methods outlined within the BCT survey guidelines.

'Your existing survey methodology has/is addressing the 'other survey' requirements which are desirable for this scheme, which we welcome.'

Proposed Bat Survey Methods for A303 and A358

Following the consultation with NE on the proposed survey methodology for the A30, the proposed methods outlined below for the A303 and A358 are based on the standard survey methods and effort proposed by WSP/PB which were deemed as acceptable by NE, together with crossing point surveys and landscape scale transects broadly in line with the methods outlined in Berthinussen & Altringham (2015). Details of the proposed survey methods are outlined below.

Preliminary Ecological Appraisal for Bats – Desk Study

The desk study will involve the collation of data from the Somerset Environmental Records Centre (SERC), and MAGIC together with a review of aerial photography and ordnance survey mapping.

The following search areas will be used for the desk study:

- 30 km from the scheme options for SACs designated for bats (specifically in relation to the Assessment of Implications on European Sites);
- 10 km from the scheme options for bat records;
- 10 km from the scheme options for bat licensing information (obtained from MAGIC); and
- Historic mapping will be used to help identify the presence of any underground sites (e.g. mine shafts) within 100 m of the scheme options .

These search areas are based on published guidance, consideration of core sustenance zones (CSZ's) for bats likely to be impacted, and initial consideration of the scheme's zone of influence (Zoi) on bats. The wider 10 km search area will be used to provide context to the data obtained in closer proximity to the scheme.

The desk study will provide context in the EclA regarding the species of conservation importance recorded in the zone of influence for the scheme and identify any significant habitats of note for focussing survey effort.

Preliminary Ecological Appraisal for Bats – Scoping Walkover

An extended phase 1 habitat survey was undertaken for both the A303 and A358 in March 2016. This walkover survey covered the various route options, undertaking an initial assessment of potential roosting, commuting and foraging habitats. The extended phase 1 survey covered a broad area up to 250-500m from the proposed route options. The aim of the initial scoping walkover was to determine the suitability of the sites for bats, to assess what further bat surveys will be needed and how those surveys should safely be carried out.

Preliminary Roost Inspection Surveys

In accordance with IAN 116/08⁴, both mature trees and structures within 100 m of the proposed construction footprint will be assessed for their potential to support bat roosts. For the A303, an area of 250 m from the proposed new road centrelines is being assessed, as a proposed construction footprint is currently unknown. Given the potential presence of rare woodland bat species barbastelle and Bechstein's, the presence of tree roosting bats is considered as important a consideration as roosts within buildings and structures. Preliminary roost inspection surveys are being undertaken between February and April 2017.

Building and Structure Surveys

Building and structure (bridge) surveys on the A303 and A358 will comprise external surveys only at this stage. The surveys will conform to the methodology outlined within the BCT survey guidelines and buildings and bridges will be assessed for their suitability to support roosting bats in accordance with BCT Guidelines as summarised in Table 1. Internal inspections will be undertaken on suitable buildings following the identification of the emerging preferred route option selection for both schemes, anticipated to be July 2018. This will minimise any unnecessary disruption to homeowners who are located outside of the emerging preferred route options. Prior to the internal inspections, a precautionary assessment of roost suitability will be made, based on the external inspection survey results.

Table 1 – Bat Roost Suitability Assessment

Potential to support roosting bats	Description
Confirmed	A feature / structure within which bats are seen to be present (either live bats, or bat carcasses) or heard 'chattering' inside will be classified as a confirmed roost. In addition any feature/structure found to contain droppings during inspections will in the first instance be considered as a confirmed roost. N.B. In some cases it may be appropriate to revise this assessment following further survey (e.g. for buildings containing low numbers of old droppings and showing no evidence of use during emergence surveys).
High	A structure or tree with one or more potential roost sites that are obviously suitable for use by larger numbers of bats on a more regular basis and potentially for longer periods of time due to their size, shelter, protection, conditions and surrounding habitat.
Moderate	A structure or tree with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but unlikely

⁴ Highways Agency (2008) Interim Advice Note 116/08: Nature conservation advice in relation to bats
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Potential to support roosting bats	Description
	to support a roost of high conservation status (with respect to roost type only – the assessments in this table are made irrespective of species conservation status, which is established after presence is confirmed).
Low	A structure with one or more potential roost sites that could be used by individual bats opportunistically. However, these potential roost sites do not provide enough space, shelter, protection, appropriate conditions and/or suitable surrounding habitat to be used on a regular basis or by larger numbers of bats (i.e. unlikely to be suitable for maternity or hibernation). A tree of sufficient size and age to contain PRFs but with none seen from the ground or features seen with only very limited roosting potential.
Negligible	Negligible habitat features on site likely to be used by roosting bats.

Tree Surveys – Ground Level Roost Assessment

The tree survey will include a ground level roost assessment using binoculars, a torch and endoscope to identify Potential Roosting Features (PRFs). An assessment of a trees suitability to support roosting bats will be made in accordance with BCT guidelines outlined in Table 1.

Tree Surveys - PRF Inspection Surveys

Following the ground level tree roost assessment, at-height Potential Roost Feature (PRF) inspection surveys will be undertaken on trees identified as having moderate or high roosting potential during the ground level tree assessment. The at-height survey will enable a more detailed inspection of PRF's to assess in more detail their likely suitability for bats and to look for evidence of bats such as live or dead bats, droppings, staining or odour. These surveys will help prevent unnecessary emergence/dawn work where features appear to be of high suitability from the ground but are actually of limited or no suitability.

Emergence/Re-entry Surveys

Buildings/Structures

The spatial extent of the building roost emergence and re-entry surveys will be based on MMS's professional opinion and will be proportionate to the roost suitability, likely ecological importance and potential impacts. This is based on the approach being proposed on the A30 by WSP/PB. As a guide, the building roost surveys will include all structures with low, moderate, and high roosting suitability which are within the construction footprint⁵, structures with moderate suitability which are within 20 m of the construction footprint, and structures with high suitability which are within 100 m of the construction footprint. These spatial extents may be extended if there are any features of potential high conservation significance, such as potential maternity roosts of Annex II species, within the core sustenance zones of these species. Structures with negligible suitability will not be surveyed further.

⁵ Note for the A303, until a construction footprint has been defined, the potential footprint will be determined as a 150m buffer either side of the proposed centreline.

The survey effort for bat emergence surveys will be based on BCT guidelines as outlined in Table 2.

Table 2: Minimum number of emergence & re-entry survey visits for high, moderate and low potential buildings and high and moderate potential trees

High bat roosting potential	Moderate bat roosting potential	Low bat roosting potential
Three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. The third visit could be either dusk or dawn. May to September ⁶	Two separate survey visits. One dusk emergence and a separate dawn re-entry survey. May to September ⁷ .	One survey visit. One dusk emergence or dawn re-entry survey (structures). May to August. No further surveys required (trees).

Source: Bat Surveys – Good Practice Guidelines 3rd Edition (Collins, 2016).

Surveyors are to be positioned in sufficient numbers so that all potential roost features can be seen by at least one surveyor during each survey. Evening emergence surveys are to be undertaken from 15 minutes before sunset until 1.5 to 2 hours after sunset; and dawn re-entry surveys undertaken from 1.5 to 2 hours before sunrise until 15 minutes after sunrise.

Trees

As outlined above for structure surveys, the spatial extent of the tree roost emergence and re-entry surveys will be based on MMS's professional opinion and will be proportionate to the roost suitability, likely ecological importance and potential impacts. In accordance with BCT guidelines, trees assessed as having low roost potential will not be subject to further surveys, but where they are directly impacted will be subject to avoidance measures such as supervised soft felling. Trees with moderate suitability which are within 20 m of the construction footprint, and trees with high suitability which are within 100 m of the construction footprint will be subject to dusk emergence surveys and/or dawn re-entry surveys.

The survey effort for bat emergence surveys will be based on BCT guidelines as outlined in Table 2. Surveyors are to be positioned in sufficient numbers so that all potential roost features (PRF) can be seen by at least one surveyor during each survey. Evening emergence surveys are to be undertaken from 15 minutes before sunset until 1.5 to 2 hours after sunset; and dawn re-entry surveys undertaken from 1.5 to 2 hours before sunrise until 15 minutes after sunrise.

Hibernation Surveys

If the preliminary building surveys identify buildings/structures with the potential to act as bat hibernation sites, these will be surveyed by an ecologist with a NE licence to disturb hibernating bats. A minimum of two visits will be undertaken, one in mid-January 2018 and one in mid-February 2018. These surveys will entail the systematic search of the sites from the entrance, with the locations of any bats seen marked on a plan of the site. In addition, static detectors will be placed within potential hibernation sites for a period of 2 weeks between January 2018 and February 2018 to monitor species present

⁶ At least two of the surveys should be undertaken between May and August

⁷ At least one of the surveys should be undertaken between May and August

Bat Activity Surveys – Transects

The transect surveys are designed to identify species composition and general distribution along the length of the schemes, and to inform the locations of crossing point surveys. Transects will be circular routes of c.5 km each largely following the liner route of the scheme options and the habitats likely to be impacted in the construction footprints. For the A303, a total of six transects will be surveyed. For the A358, a total of 12 transects will be surveyed.

Each transect will be surveyed at dusk once per month for 7 months April to October 2017 inclusive. In addition, each transect will be subject to a single follow-up dawn transect surveys within the same 24h period between July and August 2017. Approximately 8 point counts will be included per transect, with each transect taking approximately 3 hours to complete. The transect routes will be reversed on each visit and where possible, start points will be randomised to produce more robust data. Dusk transect surveys are to be undertaken from sunset until 2-3 hours after sunset. Dawn transects will be undertaken from 2-3 hours before sunrise until sunrise.

Due to the length of the schemes, the suitability of the foraging and commuting habitat is variable, ranging from low to high. Low value habitats include intensively farmed areas containing large arable/pastoral fields divided by heavily manged hedgerows. High value habitats include areas of broadleaved woodland, river corridors and smaller fields bordered by mature species-rich hedgerows.

To ensure survey effort is cost effective and proportional, the proposed survey effort of one survey per month (April to October) is based on the 'moderate' survey effort outlined in the BCT survey guidelines (2016)⁸. This effort is considered adequate for the assessment due to the mix of habitats present across the schemes, and given that the surveys will be supplemented by crossing point surveys which will be targeted on the higher quality habitats, and Landscape Scale Transects. Additionally, where areas of high quality broadleaved woodland are likely to be impacted on the A358, advanced survey techniques will be undertaken, including mist netting. These survey techniques will provide robust survey data to enable the assessment of the impacts of the schemes on bats.

Bat Activity Surveys – Static Automated

A total of three static detectors are to be installed for each transect route on the A303 and A358 (18 Static Sites for A303, 36 Static Sites for A358), in accordance with the specifications within the BCT guidelines (Collins 2016). Each detector will be deployed for five consecutive nights per month between April and October.

The automated detector sampling strategy will be stratified, which will allow the statistical comparison of data between paired locations. Static detectors will be deployed within a range of suitable habitats which may be directly or indirectly affected (fragmented) by the scheme options including hedgerows, riparian corridors, woodland, parkland, orchards and scrub. A random or systematic sampling strategy is not considered practical for the scheme due to landowner constraints and risk of damage to equipment if set up in the middle of arable/pastoral fields which make up much of the sites. A random or systematic sampling strategy would also be less useful in informing the crossing point surveys, which will be concentrated on linear features bisected by the scheme (as described below).

⁸ The scale of transect surveys is comparable to the A30 proposal which Natural England commented 'The long transects along the length of the scheme does seem onerous and could be scaled down.' Therefore, any increased survey effort is considered unnecessary.

Advanced Survey Techniques

Due to the potential impacts of the A358 scheme on areas of mature broadleaved woodland, including areas of ancient woodland, and due to the potential presence of Annex II species within the ZOI for the A358, including Barbastelle and Bechstein's, targeted mist netting surveys are proposed within key habitats to provide more detailed information on the status of these species within the survey area. Mist netting surveys will only be used where sufficient information cannot be determined from non-intrusive methods. Surveys will only be undertaken by appropriately licenced and experienced surveyors. A detailed methodology will be produced for each mist netting site once these targeted sites have been identified following completion of the preliminary bat assessments.

Crossing Point Surveys

A series of crossing point surveys will be undertaken in line with the methods described in Berthinussen and Altringham 2015. The surveys will be static, visual surveys designed to inform the impact assessment in relation to the fragmentation of bat foraging/ commuting habitat and direct mortality. This data will be used to inform the nature and location of required bat crossing structures and will facilitate the future monitoring of the effectiveness of any mitigation.

The crossing point survey method described in Berthinussen and Altringham 2015 requires at least six visits per location to provide a robust baseline from which to monitor the effectiveness of crossing structures. Berthinussen and Altringham conducted their surveys between June and August, however, due to the selection of emerging preferred routes for the A303 and A358 in July 2017, we are proposing to undertake the six surveys at each location following the identification of the emerging preferred routes, to minimise any unnecessary survey effort. Due to the southerly location of the site and the potential for hibernation / transitional / swarming sites in the surrounding landscape, it is considered appropriate to undertake surveys between July and September 2017. Repeated surveys will be at least 1 week apart.

The crossing point survey locations will be informed by the first three months of transect and automated survey data, and also by the results of the preliminary surveys of buildings and trees with roost potential. It is estimated that 25 crossing point surveys will be required for the A358 and 10 for the A303. This is based on a visual assessment of the habitats being severed by the schemes which are likely to be important for commuting and foraging bats, focusing on mature hedgerows with good connectivity, woodland blocks and riparian habitats which the schemes will impact.

The surveys will record bat species, numbers, flight height, direction, location, time of crossing, and any other general behaviour. The surveys will commence at sunset and will be undertaken for a minimum of 60 minutes. After 60 minutes, it is usually too dark to record visual bat movements accurately. However, if late emerging species are recorded, surveys will be extended by up to 30 minutes.

Landscape Scale Transect Surveys

Landscape scale surveys will be undertaken in line with the methods described in Berthinussen and Altringham 2015. The survey will consist of walked transects 1 km either side of and perpendicular to the proposed routes, with bat activity recorded using full spectrum bat detectors during 10 min stationary spot checks at 100 m intervals

from the route centrelines. Weather and habitat variables will also be recorded at each spot check. Ten transects will be carried out on both the A358 and A303 to ensure sufficient data to detect changes in overall bat activity. For the A358 this will include 10 independent transects (with five walked towards the road, and five walked away). Due to the smaller size of the scheme, the A303 surveys will include 5 independent transects (each walked twice, once away from and once towards the road). Each transect will be at least 500m apart. Each of the ten transects will be repeated once during the season. Surveys will commence 30 minutes after sunset, and be completed within approximately two hours. Surveys will be undertaken between July and August 2017, following the identification of the emerging preferred routes for both schemes. An equal number of transects will be selected on each side of the road and equal numbers walked towards and away from the road. Transects will be located along minor roads, bridleways or public footpaths so that they will be repeatable for future monitoring. In accordance with the survey method, data will be subject to auto species analysis using Bat Classify or comparable software. Data will then be statistically analysed using the methodology outlined in Berthinussen and Altringham (2015).

Berthinussen and Altringham recommend that baseline data is collected over two survey season where possible. Due to the time constraints associated with the DCO Application which is currently scheduled for May 2018, it is not possible to undertake two seasons of surveys prior to the applications for each scheme. However, in accordance with the survey method, it is proposed to repeat the surveys between June and August 2018. These 2018 surveys will not inform the Environmental Statement but will be used to provide a robust baseline.

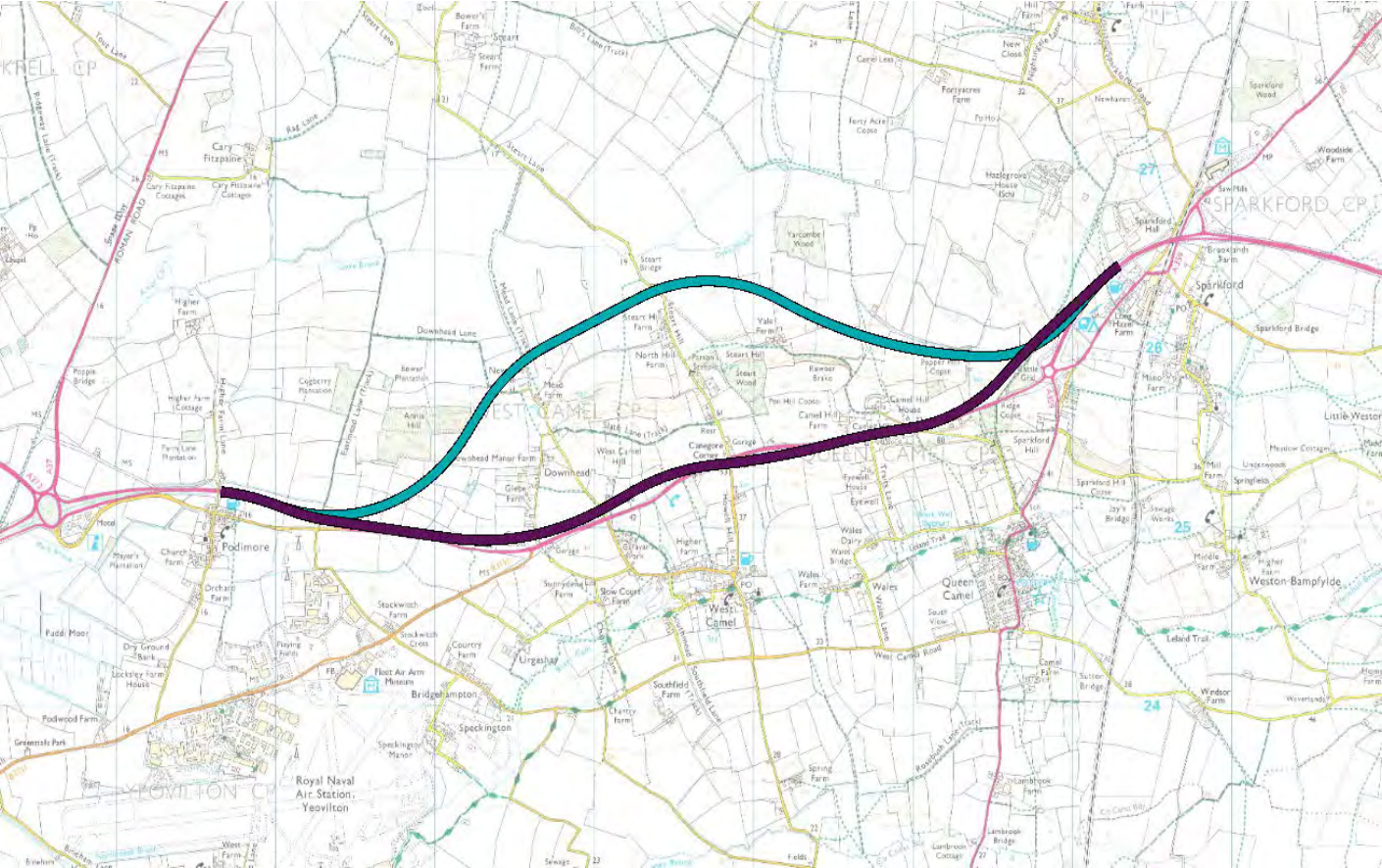
Conclusion

The above methodology is considered to provide a robust approach for assessing the impacts of the A303 and A358 schemes on bats and will provide a baseline to monitor the impacts and success of mitigation. The recommended methods are in line with both the BCT Guidelines (2016) and Berthinussen and Altringham (2015).

Appendix A – Outline of Schemes

The current proposal extent of each scheme is presented in Figure 1 and 2 below.

Figure 1: A303 Route options

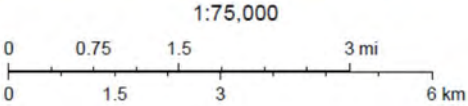


Route Options – Blue Option 2, Purple Option 1

Figure 2: A358 Route Buffers



March 2, 2017



Appendix B – Natural England Response to WSP/PB A30 Survey Approach

Response to WSP/Parsons Brinckerhoff on Meeting Notes and Memo

Thank you for the opportunity to comment on the WSP/PB memo dated 1st September and meeting notes dated 3rd September describing the bat survey approach for the A30, sent to us on 13th December.

In preparing this response I have spoken to both Jean Matthews (NRW) and Professor John Altringham (Leeds University –retired) All three of us were members on the Steering Group for the Defra commissioned 'WC1060 – Development of a Cost-Effective method for monitoring the effectiveness of mitigation for bats crossing linear transport infrastructure'. Professor John Altringham was the lead researcher on the project. John does not agree with the meeting notes, which state that the landscape methodology was not to be taken forward, so maybe there was a misunderstanding, as different methodologies and research proposals were discussed at the workshop.

As noted in our previous discussions, the Defra report makes it clear that the methodology should be used in combination with existing methodology for identifying bat roosts, important foraging habitats and species which are not easy to detect, for example through use of acoustic detectors only.

Your existing survey methodology has/is addressing the 'other survey' requirements which are desirable for this scheme, which we welcome. However, by not including the transect methodology, the proposed survey design does not allow for a methodology that is repeatable i.e. it does not establish a baseline by which the bat population can be assessed. At a landscape scale the proposed survey design will not be able to statistically assess whether bat populations have remained stable, increased, decreased or if bat diversity has been altered to any degree by this scheme. Whilst, the methodology should be suitable for identifying crossing points, it won't provide a baseline by which to effectively measure the success or otherwise of any mitigation.

We would suggest that a combination of the proposed WSP/PB methodology with that stated in the WC1060 report would be advisable for this scheme. The long transect(s) along the length of the scheme does seem onerous and could be scaled down. This could then allow for the transect methodology to be incorporated in a cost-effective way.

A couple of final points of detail,:

- if statics were to be used as a replacement for people walking the transects with detectors, which is acceptable as an alternate methodology, this would require statics being placed at each of those spot check points. Collins et al (2016) states on P8 that 'this edition of the guidelines does not include specific advice in relation to road and rail schemes, although the principles of survey design and execution do apply. Berthinussen and Altringham (2015) provide information on pre and post construction surveys of linear infrastructure schemes, designed specifically to assess the effectiveness of mitigation for bats crossing them'.

We would be happy to discuss further the above points to agree a proportionate and cost effective way forward for replicable bat surveys for pre and post construction for this important road scheme, so that any measures

required to address and monitor the impacts of the scheme are based on a robust evidence base and are proportionate and cost effective.

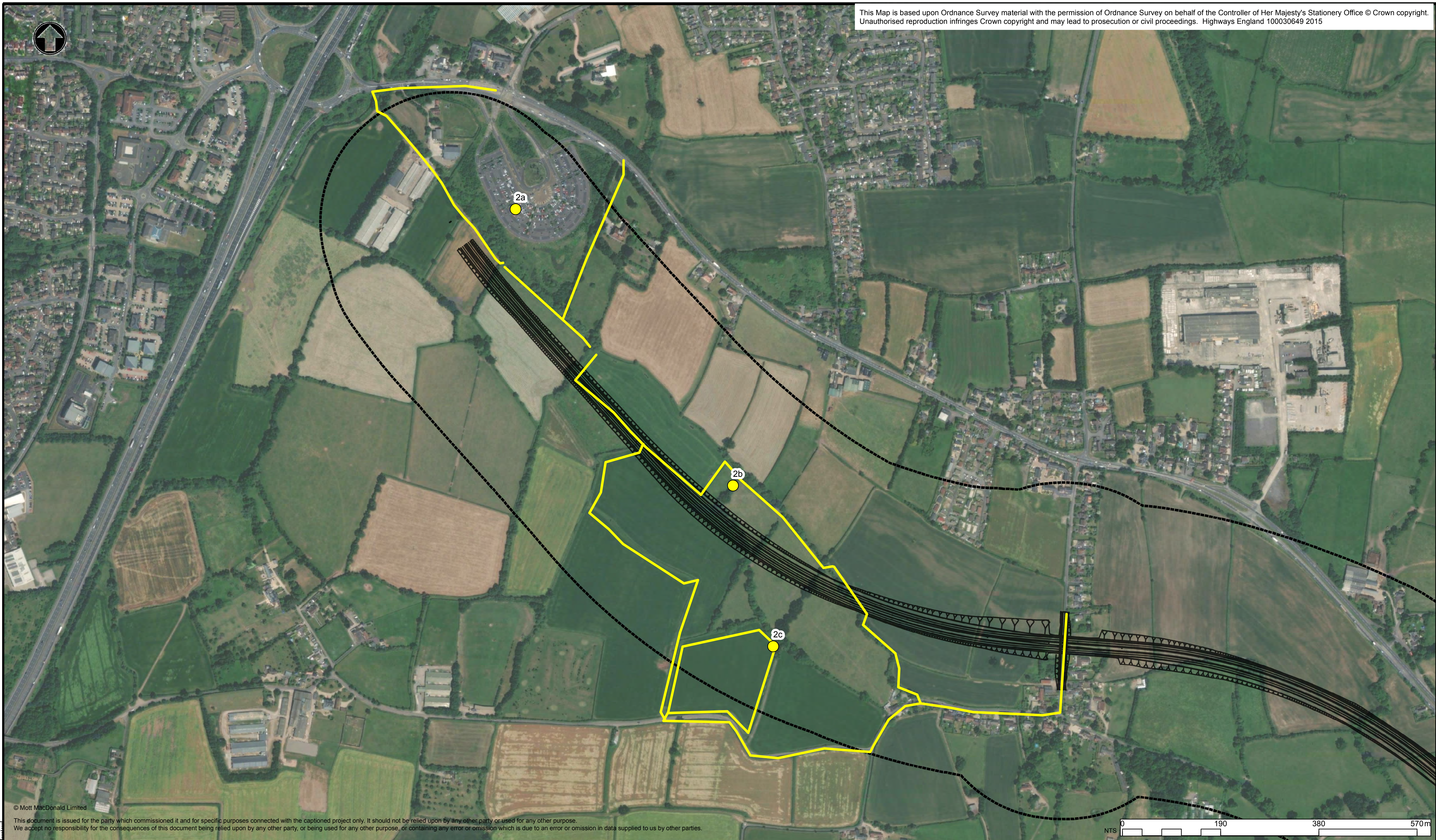
I am free morning of 31st Jan to discuss further. I will then be on leave for 4 weeks. I look forward to hearing from you.

Yours Sincerely,

K, Walsh

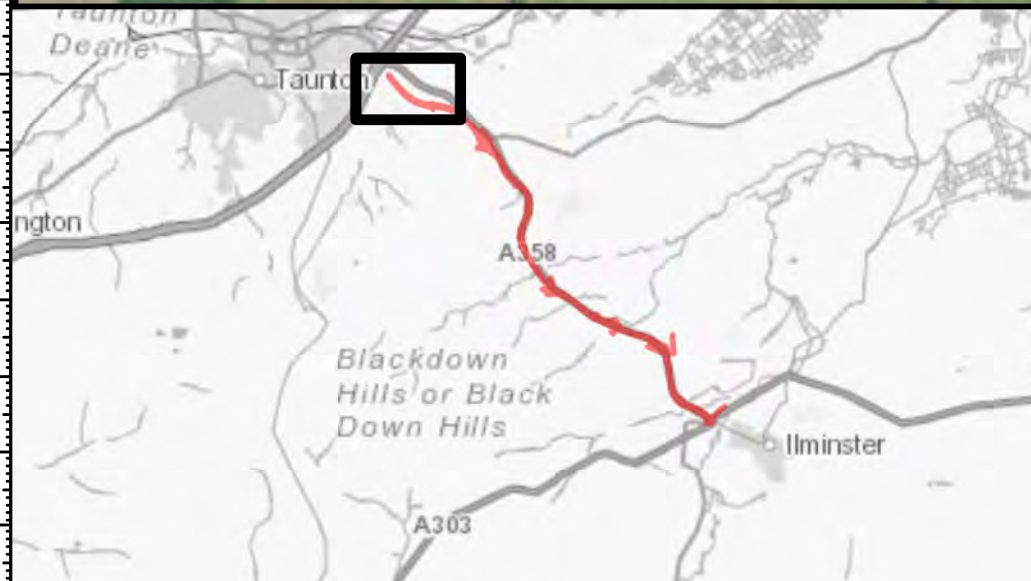
Katherine Walsh (Senior Specialist – Mammals)

Appendix D - Activity transect routes and static locations



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Key to symbols

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- Static**
- 2a
- 2b
- 2c
- Transect**
- 2

References drawings

Drawing Status

Suitable for Stage Approval

Suitability

S4

Project Title

A358 Taunton to Southfields

Mott MacDonald Sweco

Stoneham Place
 Stoneham Lane
 Southampton
 SO50 9NW
 Tel : +44 (0)23 8062 8800
 Fax : +44 (0)23 8062 8801
 www.mottmac.com

Drawing Title

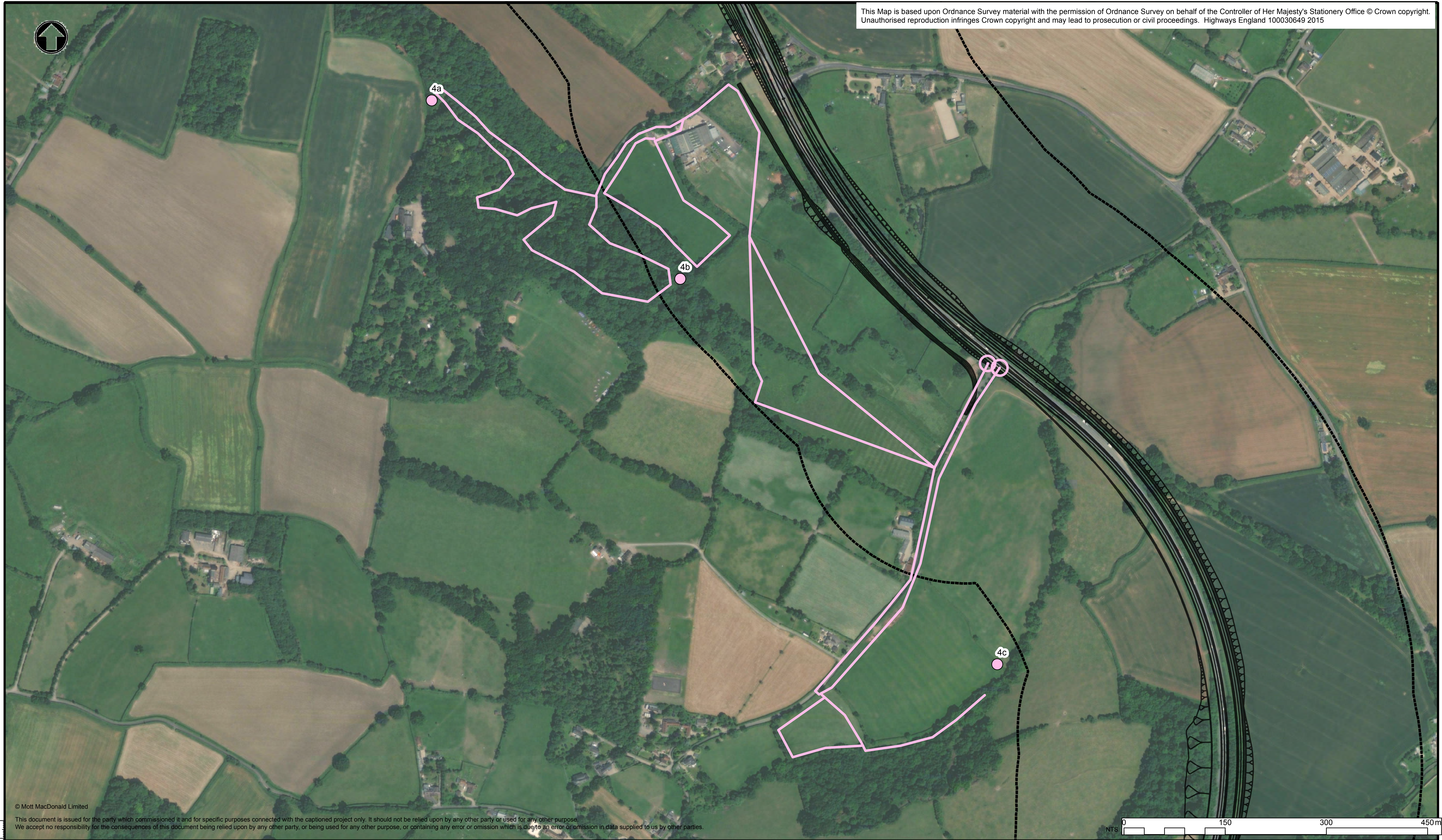
Bat static and transect locations
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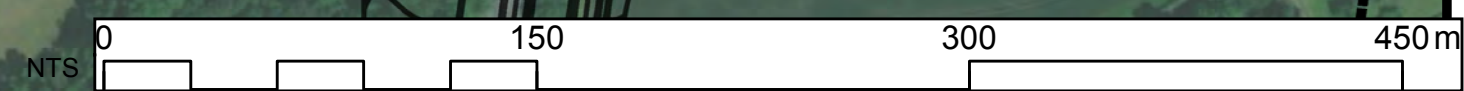
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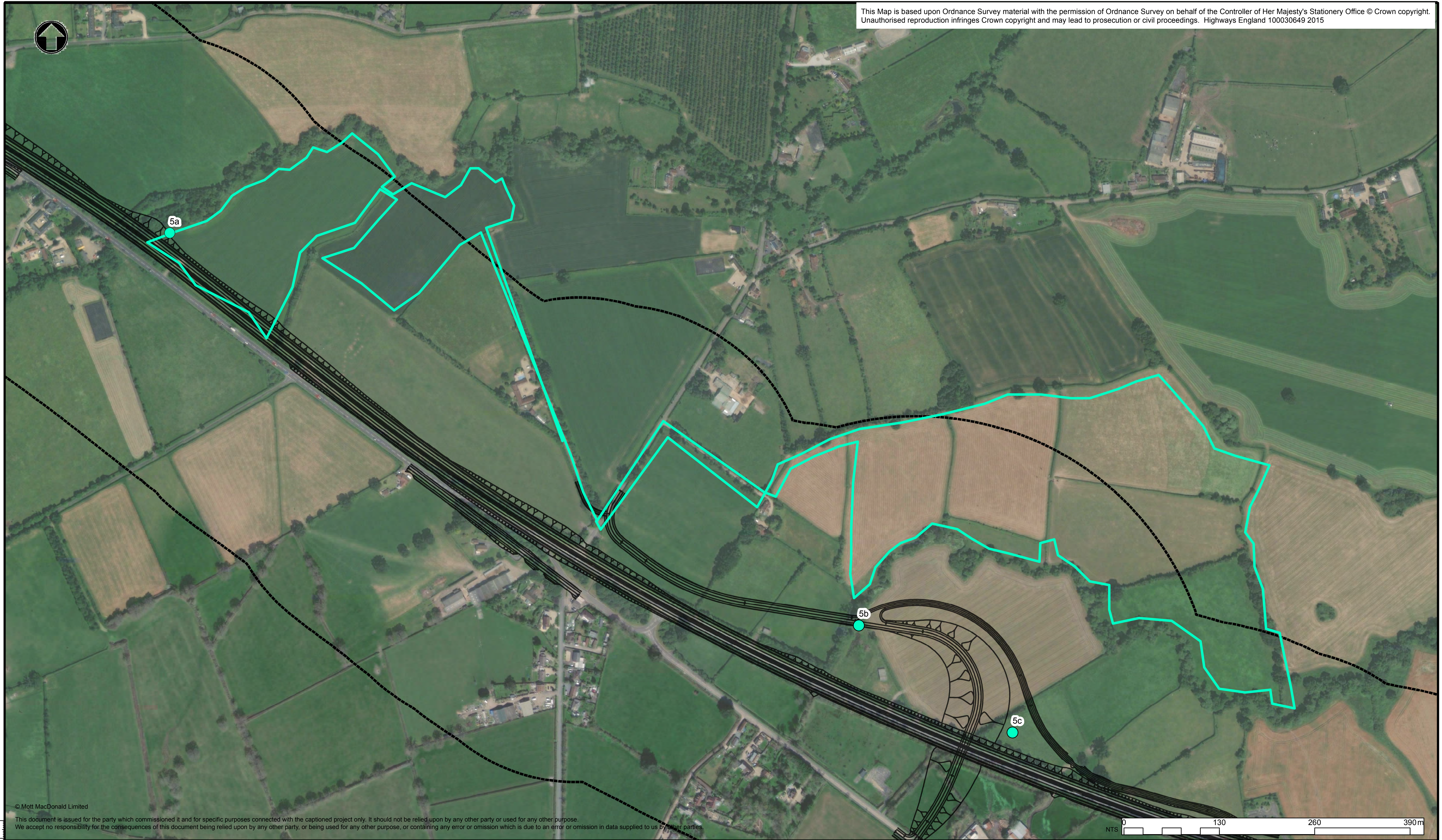
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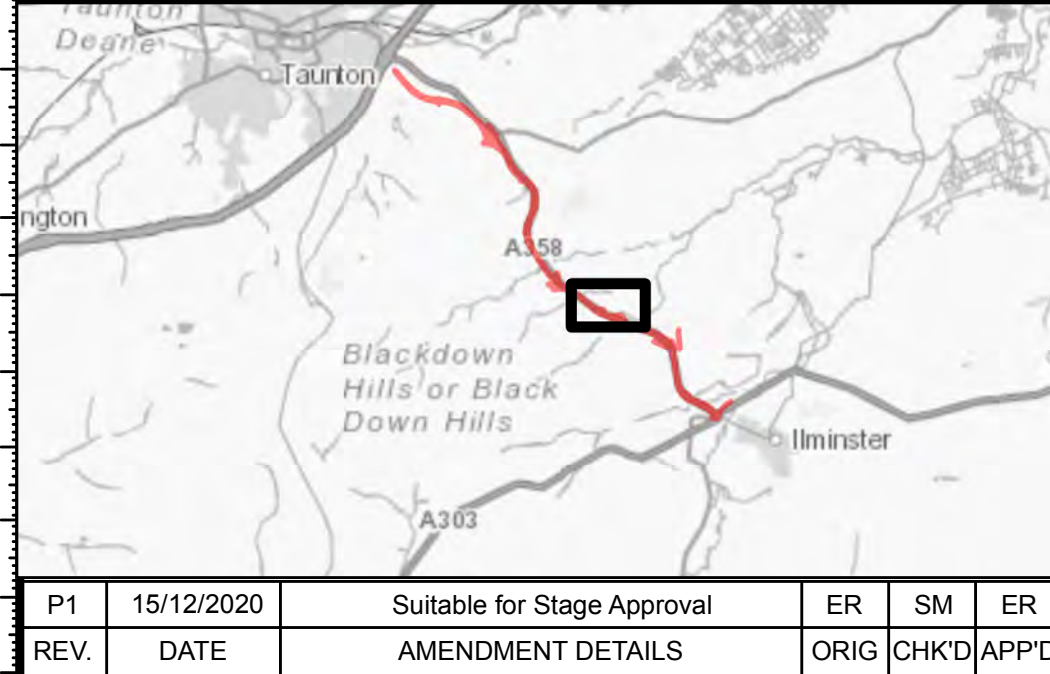
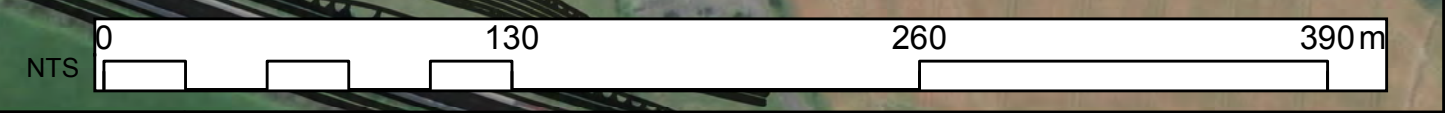
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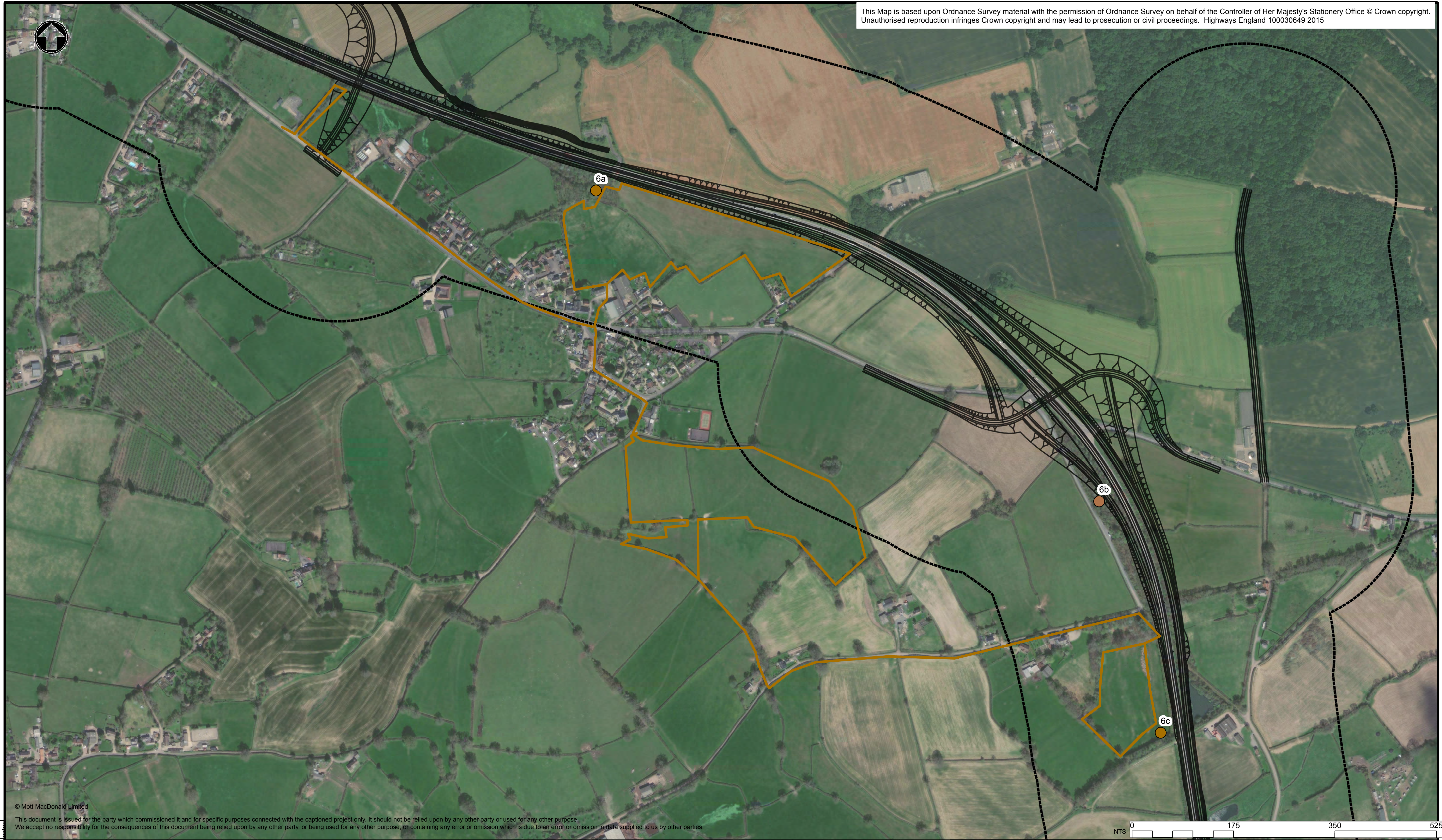


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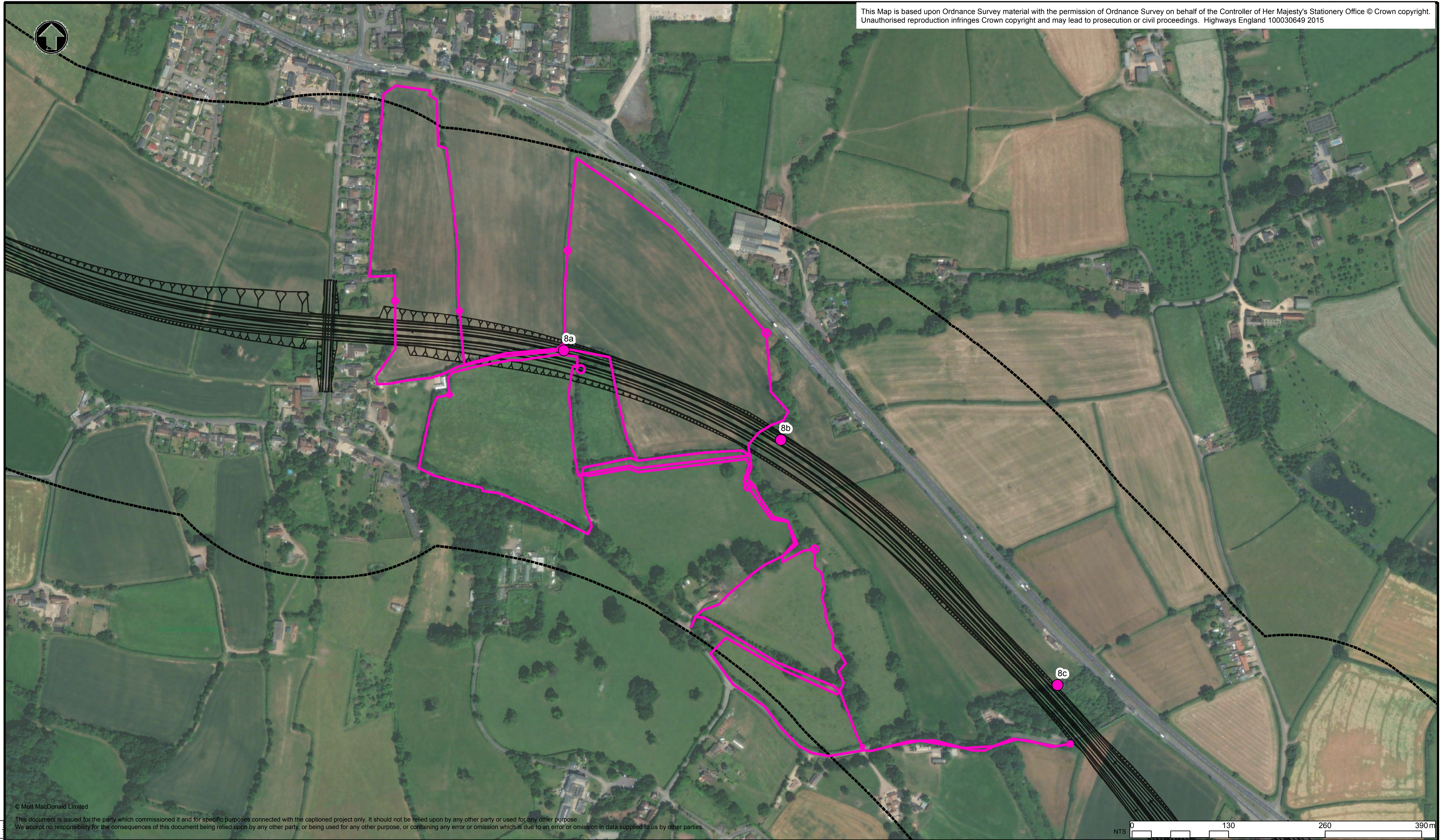
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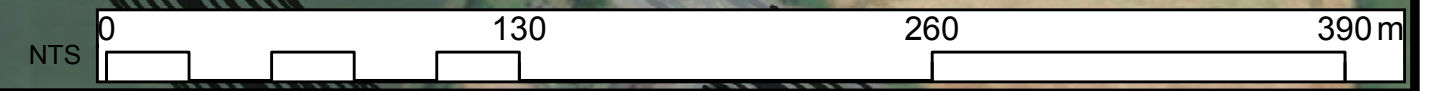
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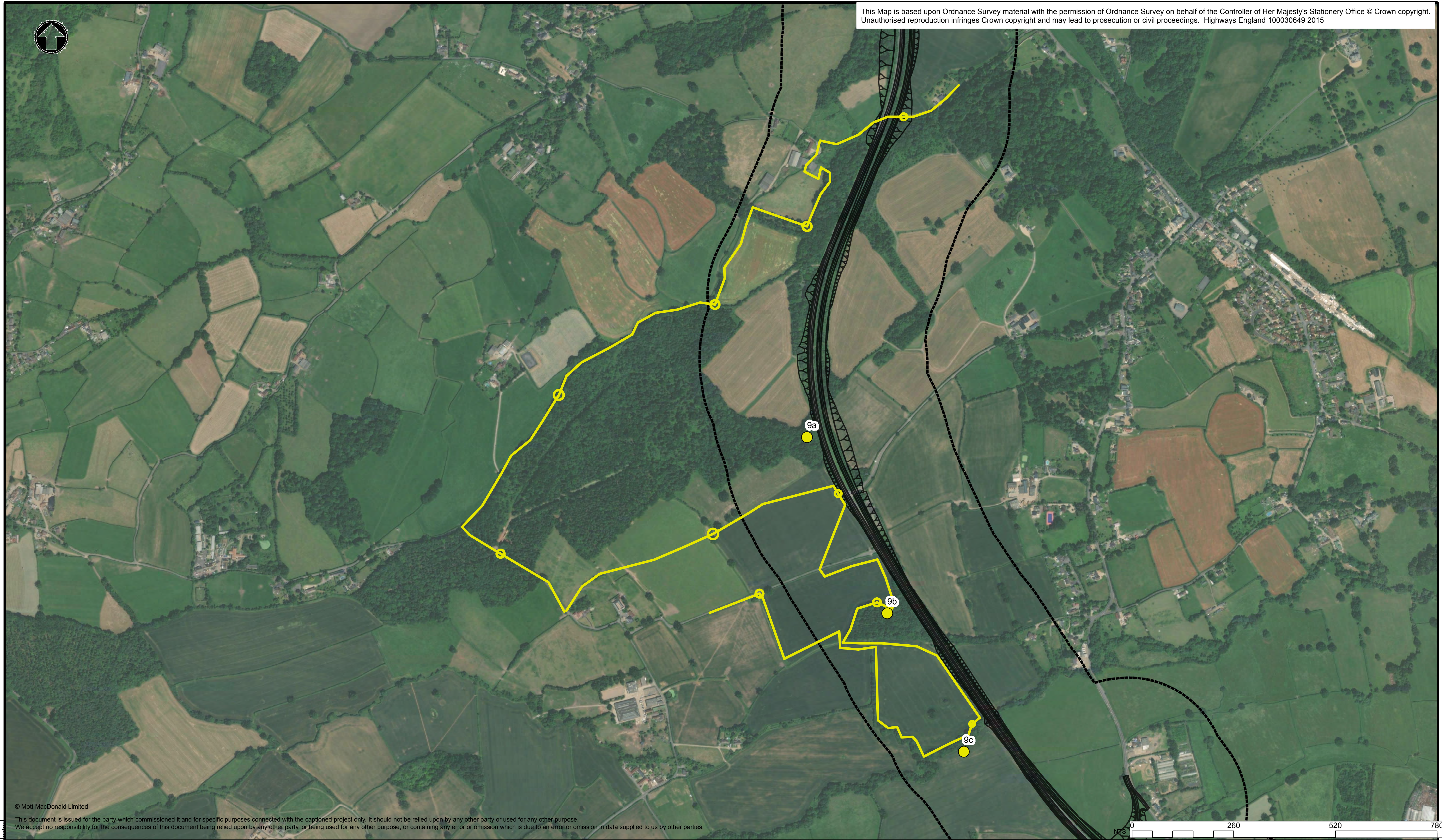
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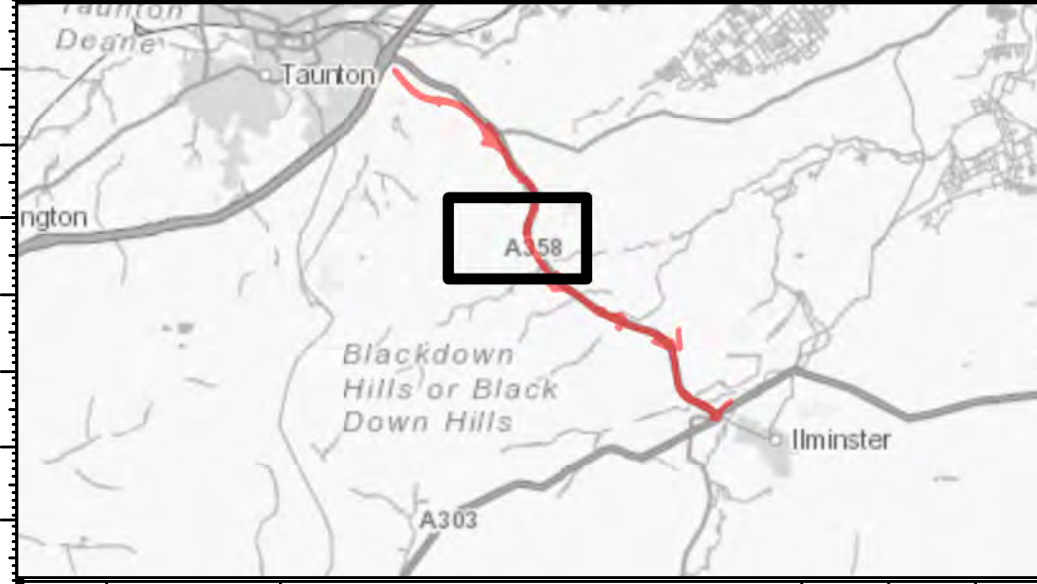
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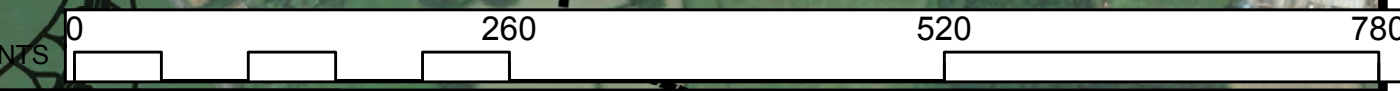
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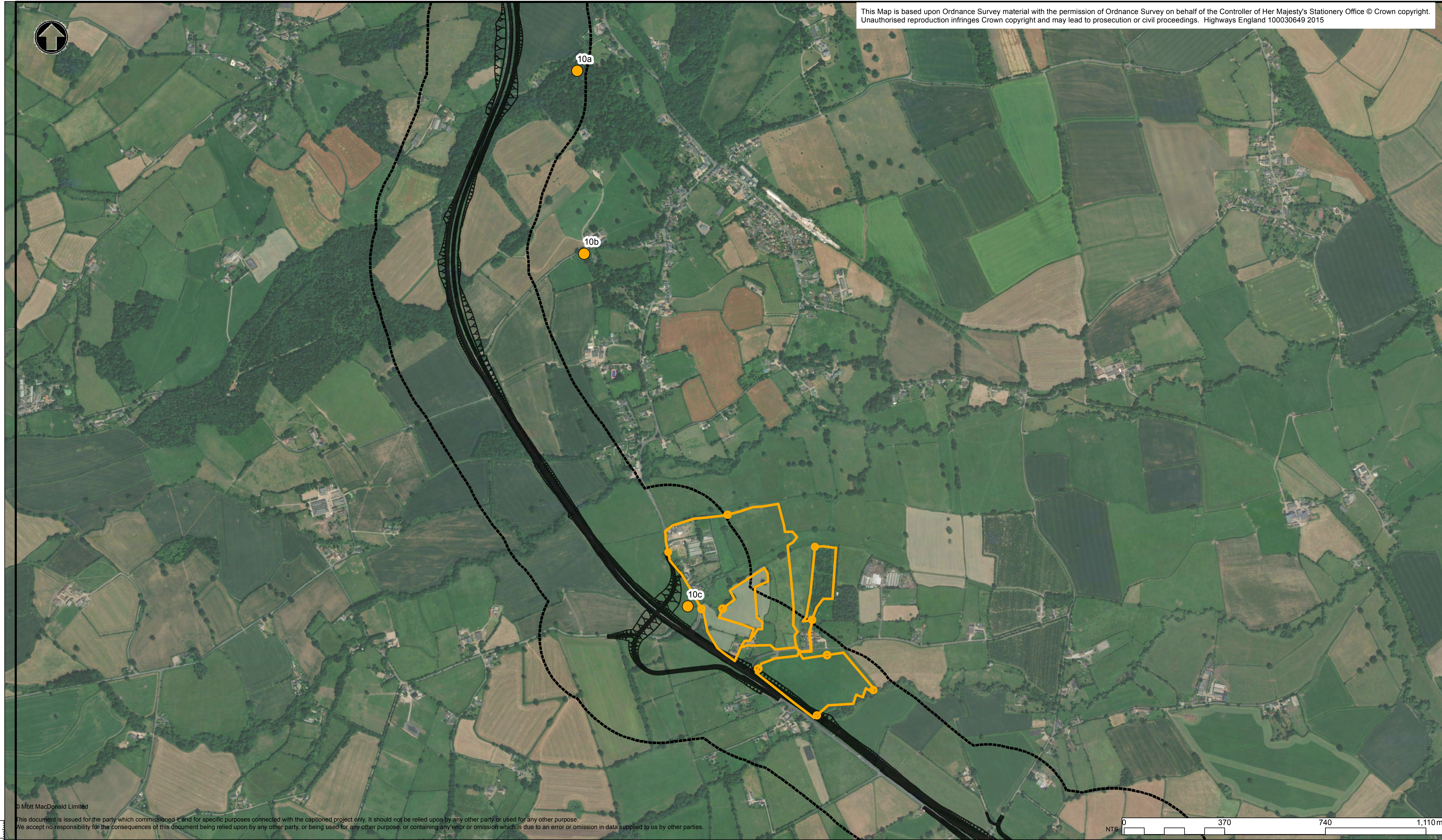
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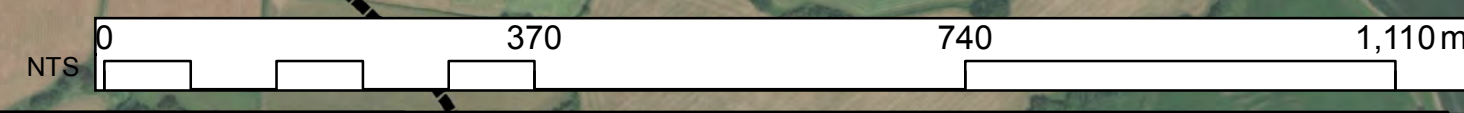
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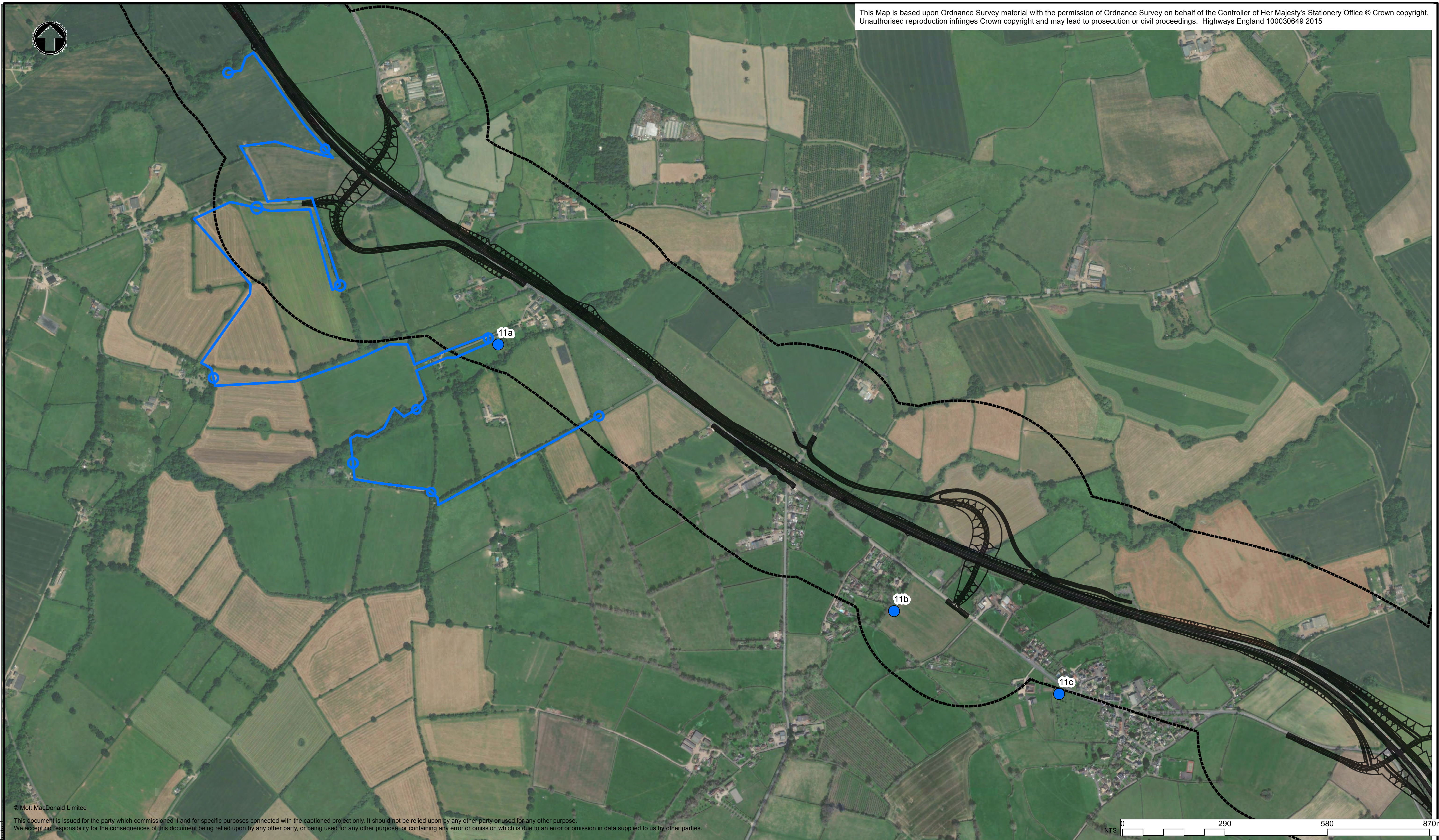
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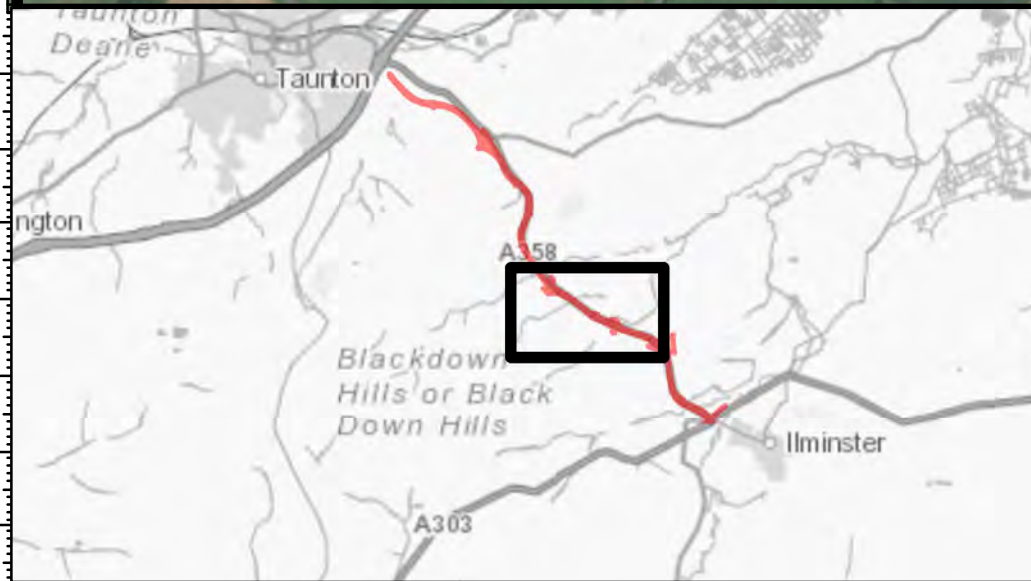
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Location		Type		Role		Number		Project Ref. No. 370774	
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Key to symbols

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References drawings

Drawing Status

Suitable for Stage Approval

Suitability

S4

Project Title

A358 Taunton to Southfields

Mott MacDonald Sweco

Stoneham Place
Stoneham Lane
Southampton
SO50 9NW
Tel : +44 (0)23 8062 8800
Fax : +44 (0)23 8062 8801
www.mottmac.com

Drawing Title
Bat static and transect locations
Transect 11

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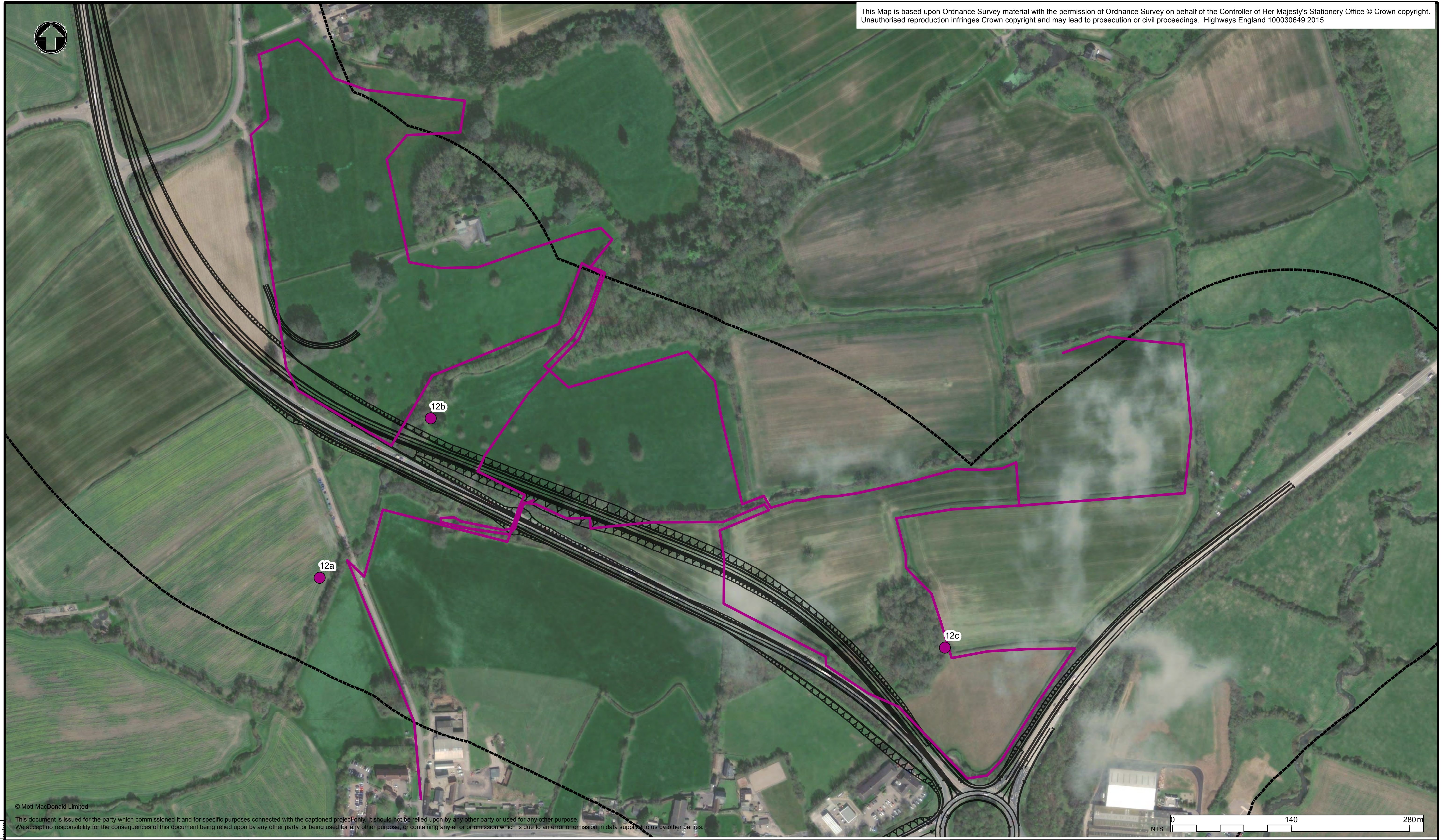
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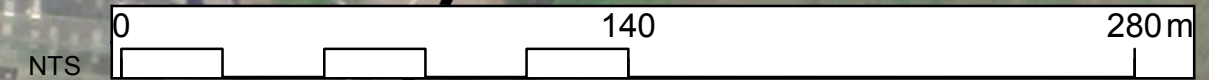
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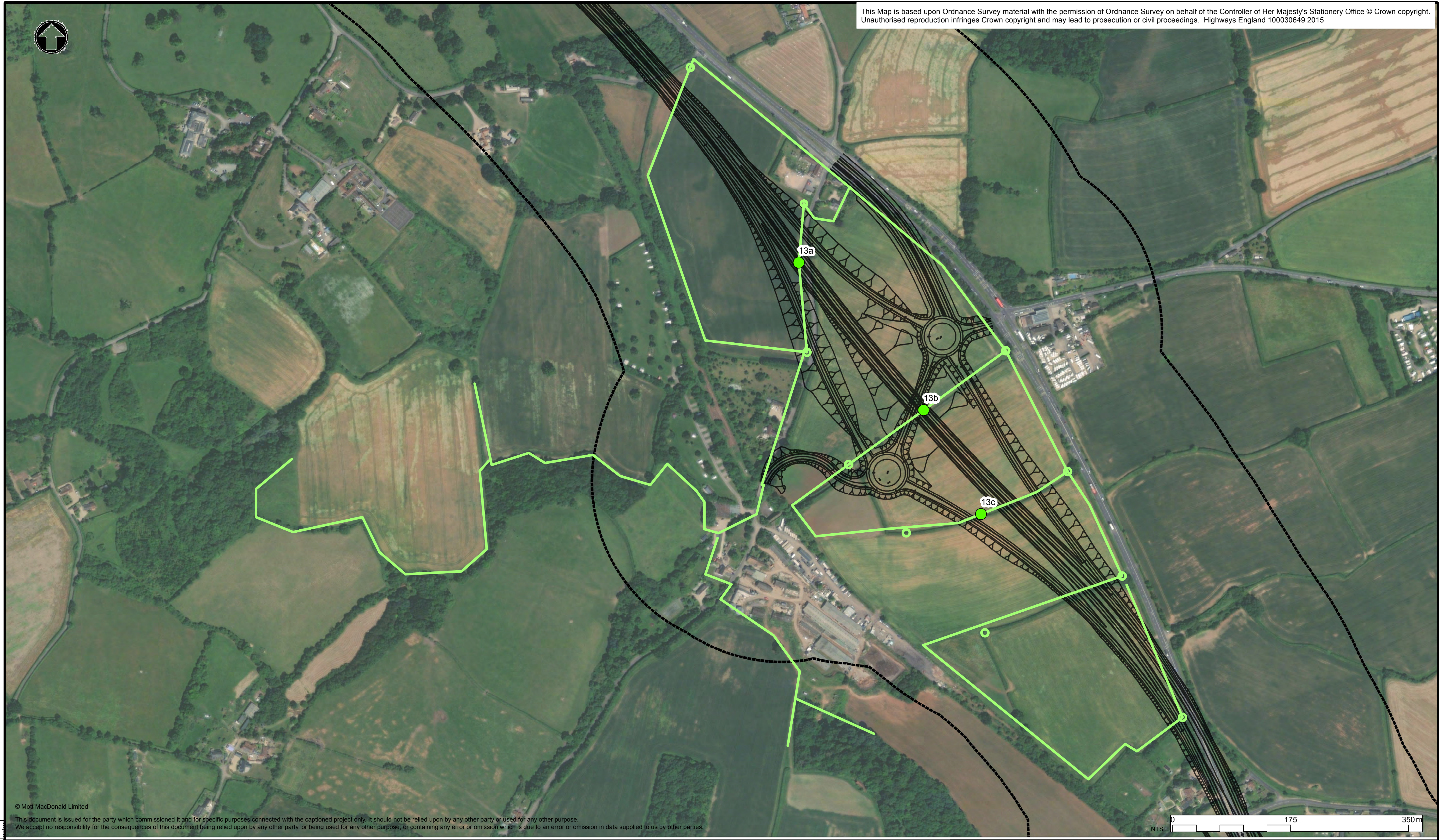
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References drawings

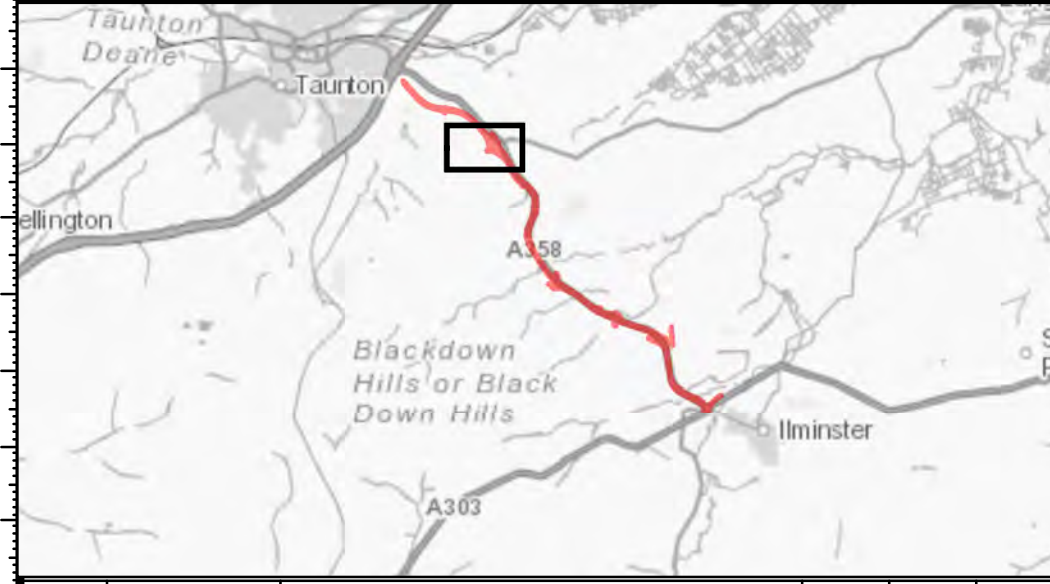
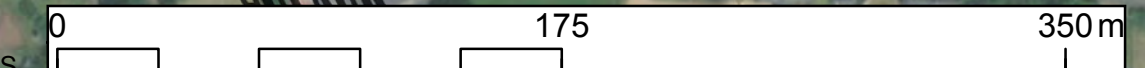
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REV. DATE		AMENDMENT DETAILS		ORIG	CHK'D	APP'D	
P1	07/01/2021	Suitable for Stage Approval	ER	SM	ER		

REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D
P1	07/01/2021	Suitable for Stage Approval	ER	SM	ER



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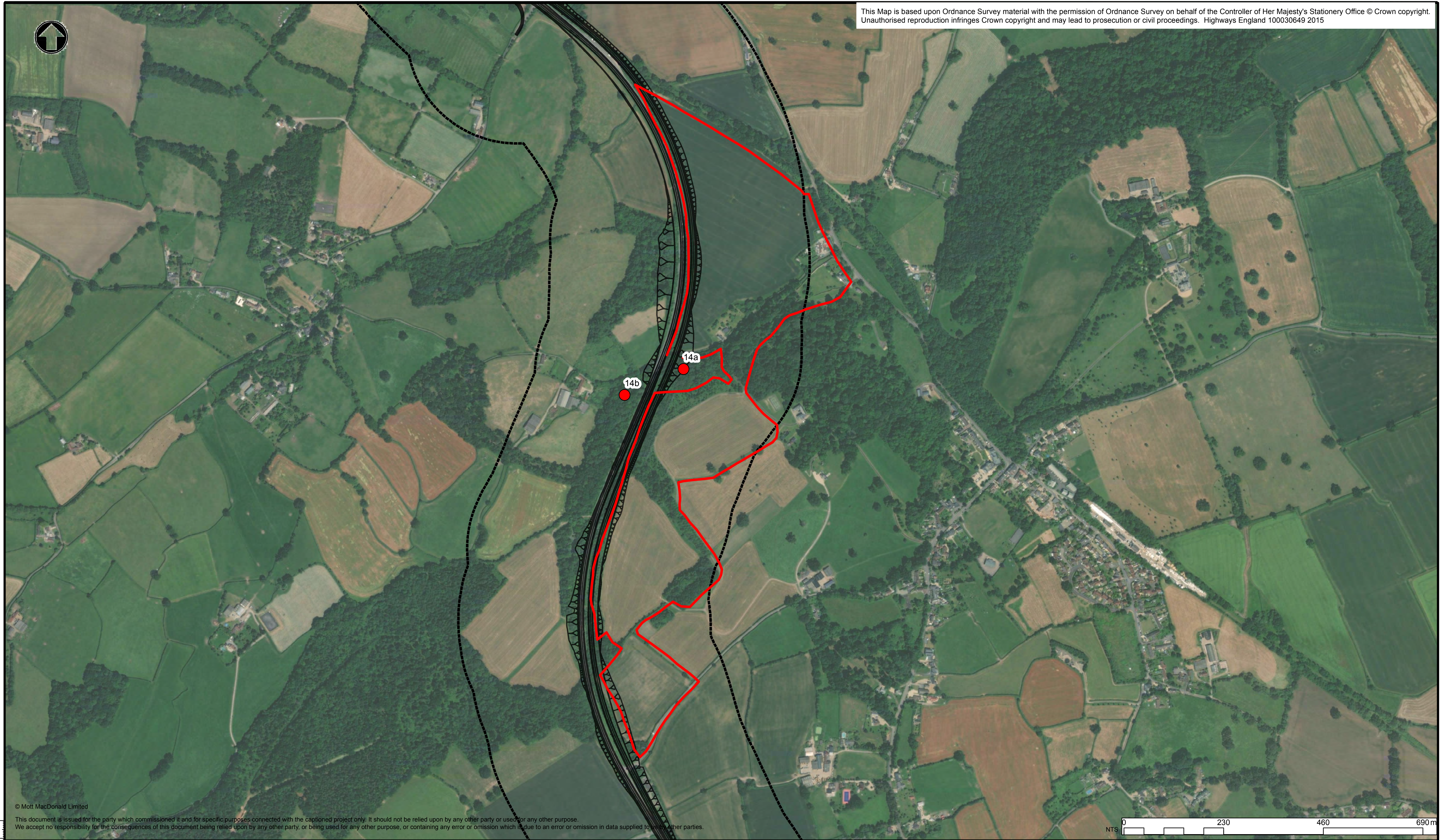
Notes Key to symbols References drawings Drawing Status

Pink Modified Scheme, Mott MacDonald (2018)
Transect and Static Locations, Mott MacDonald (2017-2020)
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus

- Pink modified scheme option
- 250m buffer
- 13a
- 13b
- 13c
- Transect 13

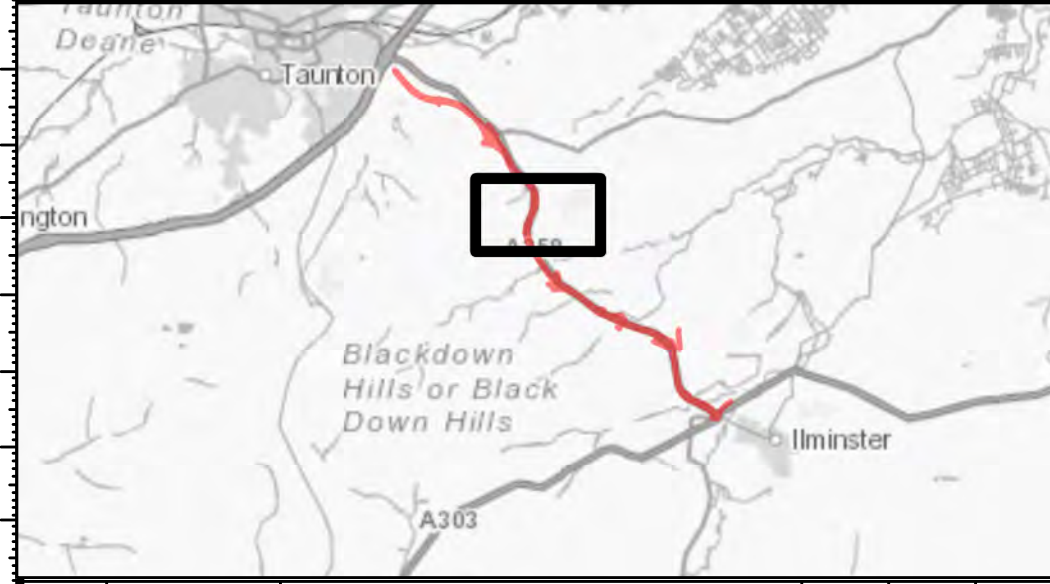
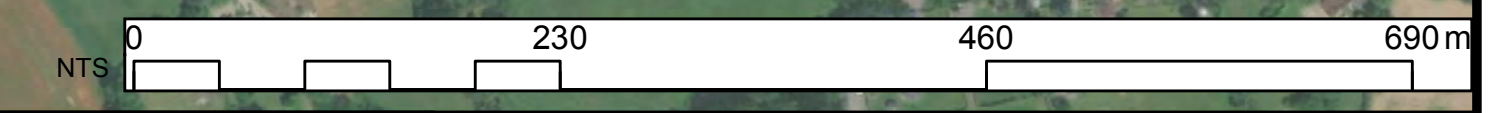
Suitable for Stage Approval		S4		Project Title A358 Taunton to Southfields			
Mott MacDonald Sweco Stoneham Place Stoneham Lane Southampton SO50 9NW Tel : +44 (0)23 8062 8800 Fax : +44 (0)23 8062 8801 www.mottmac.com		Drawing Title Bat static and transect locations Transect 13					
		Scale NTS	Designed DB	Drawn ER	Checked SM	Approved ER	
Client 		Original Size A1	Date 07/01/2021	Date 07/01/2021	Date 07/01/2021	Date 07/01/2021	
Drawing Number HE PIN 000		Originator MMSJV		Volume - EBD -		Project Ref. No. 370774	
Location		- DR - LB -		0171		Revision P1	

P1	07/01/2021	Suitable for Stage Approval	ER	SM	ER
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D



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Notes

Pink Modified Scheme, Mott MacDonald (2018)
Transect and static locations, Mott MacDonald (2017-2020)
Service Layer Credits: Source: Esri, Maxar, GeoEye, Earthstar Geographics,

Key to symbols

- Pink modified scheme option
- 250m buffer
- Static**
- 14a
- 14b
- Transect**
- 14

References drawings

Drawing Status		Suitable for Stage Approval		S4		Project Title		A358 Taunton to Southfields											
Client				Stoneham Place Stoneham Lane Southampton SO50 9NW Tel : +44 (0)23 8062 8800 Fax : +44 (0)23 8062 8801 www.mottmac.com		Drawing Title		Bat static and transect locations											
Scale		NTS		Designed		DB		Drawn		ER		Checked		SM		Approved		ER	
Original Size		A1		Date		15/12/2020		Date		15/12/2020		Date		15/12/2020		Date		15/12/2020	
Drawing Number		HE PIN		Originator		Volume		Project Ref. No.		HE551508 - MMSJV		- EBD -		370774		Revision		P1	
Location		000		Type		- DR - LB -		Number		0173									

P1	15/12/2020	Suitable for Stage Approval	ER	SM	ER
REV.	DATE	AMENDMENT DETAILS	ORIG	CHK'D	APP'D

Appendix E - Transect activity proformas

BA1-BA4 BAT ACTIVITY SURVEY											
Ecology ID		Land Parcel Reference		Surveyor(s)		DB JD		Survey type	BA1: Bat - Activity (transect)	Date	16/05/2017
Survey Start (24 hours)	20:50	Survey End (24 hours)	23:05	Sunset	20:57	Sunrise		Detector / recording device type	Elekon batlogger		
Transect ID	F002	Transect start Eastings (X)	326030	Transect start Northings (Y)		Transect end Eastings (X)	124278	Transect end Northings (Y)	325833	Transect end Northings (Y)	124762
WEATHER CONDITIONS											
Air Temperature (°C)	15	Wind	1	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Mild and Dry		
OBSERVATIONS											
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F001	20:58	N.noc	1	NS	C - Commuting			16		found on analysis	Yes
F002	20:58	N.noc	1	NS	C - Commuting			17		changed time and track no.	Yes
F003	21:02	N.noc	1	NS	C - Commuting			32		found on analysis	Yes
F004	21:03	N.noc	1	S	F - Foraging	N	50	33		confirmed	Yes
F005	21:03	N.noc	1	NS	C - Commuting			34		found on analysis	Yes
F006	21:03	N.noc	1	NS	C - Commuting			35		found on analysis	Yes
F007	21:03	N.noc	1	NS	C - Commuting			36		found on analysis	Yes
F008	21:03	N.noc	1	NS	C - Commuting			37		found on analysis	Yes
F009	21:03	N.noc	1	NS	C - Commuting			38		found on analysis	Yes
F010	21:03	N.noc	1	NS	C - Commuting			39		found on analysis	Yes
F011	21:03	N.noc	1	NS	C - Commuting			40		found on analysis	Yes
F012	21:04	N.noc	1	NS	C - Commuting			41		found on analysis	Yes
F013	21:04	N.noc	1	NS	C - Commuting			42		found on analysis	Yes
F014	21:04	N.noc	1	NS	C - Commuting			43		found on analysis	Yes
F015	21:04	N.noc	1	NS	C - Commuting			44		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F016	21:04	N.noc	1	NS	C - Commuting			45		found on analysis	Yes
F017	21:05	N.noc	1	NS	C - Commuting			50		found on analysis	Yes
F018	21:05	N.noc	1	NS	C - Commuting			51		found on analysis	Yes
F019	21:05	N.noc	1	NS	C - Commuting			52		found on analysis	Yes
F020	21:06	N.noc	1	NS	C - Commuting			53		found on analysis	Yes
F021	21:06	N.noc	1	NS	C - Commuting			54		found on analysis	Yes
F022	21:07	N.noc	1	NS	C - Commuting			58		found on analysis	Yes
F023	21:07	N.noc	1	NS	C - Commuting			59		found on analysis	Yes
F024	21:07	N.noc	1	NS	C - Commuting			60		found on analysis	Yes
F025	21:07	N.noc	1	NS	C - Commuting			61		found on analysis	Yes
F026	21:12	N.noc	1	NS	C - Commuting			83		found on analysis	Yes
F027	21:13	N.noc	1	S	F - Foraging	SW	50	84		confirmed	Yes
F028	21:13	N.noc	1	NS	F - Foraging			85		found on analysis	Yes
F029	21:14	N.noc	1	NS	C - Commuting			93		found on analysis	Yes
F030	21:14	N.noc	1	NS	C - Commuting			94		found on analysis	Yes
F031	21:14	N.noc	1	S	F - Foraging	SW	50	95		changed time	Yes
F032	21:14	N.noc	1	NS	F - Foraging			96		found on analysis	Yes
F033	21:15	N.noc	1	NS	C - Commuting			97		found on analysis	Yes
F034	21:15	P.pyg	1	NS	F - Foraging			98		confirmed	Yes
F035	21:16	P.pip	1	NS	F - Foraging			103		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F036	21:17	P.pyg	1	S	F - Foraging	W	2	105		Foraging along hedgerow - changed track no.	Yes
F037	21:17	N.noc	1	NS	C - Commuting			106		found on analysis	Yes
F038	21:20	P.pip	1	NS	F - Foraging			116		found on analysis	Yes
F039	21:20	P.pip	1	NS	C - Commuting			117		confirmed	Yes
F040	21:21	P.pip	1	NS	F - Foraging			118		found on analysis	Yes
F041	21:21	P.pip	1	NS	S - Socialising			119		changed from N.noc to P.pip socialising	Yes
F042	21:23	P.pip	1	NS	F - Foraging			130		found on analysis	Yes
F043	21:23	Pip sp.	1	S	F - Foraging	W	3	131		confirmed	Yes
F044	21:23	P.pip	1	NS	F - Foraging			133		found on analysis	Yes
F045	21:23	P.pip	1	NS	F - Foraging			134		found on analysis	Yes
F046	21:23	P.pip	1	NS	F - Foraging			135		found on analysis	Yes
F047	21:23	P.pip	1	NS	F - Foraging			136		found on analysis	Yes
F048	21:23	P.pip	1	NS	F - Foraging			137		found on analysis	Yes
F049	21:24	P.pip	1	NS	F - Foraging			138		found on analysis	Yes
F050	21:24	P.pip	1	NS	F - Foraging			139		found on analysis	Yes
F051	21:24	P.pip	1	NS	F - Foraging			140		found on analysis	Yes
F052	21:24	P.pip	1	NS	F - Foraging			141		found on analysis	Yes
F053	21:24	P.pip	1	NS	F - Foraging			142		found on analysis	Yes
F054	21:25	P.pip	1	NS	F - Foraging			144		found on analysis	Yes
F055	21:25	P.pip	1	NS	F - Foraging			145		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F056	21:25	P.pip	1	NS	F - Foraging			146		found on analysis	Yes
F057	21:25	P.pip	1	NS	F - Foraging			147		found on analysis	Yes
F058	21:25	P.pip	1	NS	F - Foraging			148		found on analysis	Yes
F059	21:25	P.pip	1	NS	F - Foraging			149		found on analysis	Yes
F060	21:25	P.pip	1	NS	F - Foraging			150		found on analysis	Yes
F061	21:26	P.pip	1	NS	F - Foraging			156		found on analysis	Yes
F062	21:27	P.pip	1	S	F - Foraging		10	158		Foraged around tree	Yes
F063	21:26	P.pip	1	NS	F - Foraging			159		found on analysis	Yes
F064	21:27	P.pip	1	NS	F - Foraging			160		found on analysis	Yes
F065	21:27	P.pip	1	NS	F - Foraging			161		found on analysis	Yes
F066	21:27	P.pip	1	NS	F - Foraging			162		found on analysis	Yes
F067	21:27	P.pip	1	NS	F - Foraging			163		found on analysis	Yes
F068	21:27	P.pip	1	NS	F - Foraging			164		found on analysis	Yes
F069	21:27	P.pip	1	NS	F - Foraging			165		found on analysis	Yes
F070	21:27	P.pip	1	NS	F - Foraging			166		found on analysis	Yes
F071	21:27	P.pip	1	NS	F - Foraging			167		found on analysis	Yes
F072	21:27	P.pip	1	NS	F - Foraging			169		found on analysis	Yes
F073	21:27	P.pyg	1	NS	C - Commuting			170		found on analysis	Yes
F074	21:29	P.pyg	1	NS	F - Foraging			182		confirmed	Yes
F076	21:48	P.pip	1	NS	C - Commuting			326		confirmed	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F077	21:49	P.pip	1	NS	F - Foraging			328		found on analysis	Yes
F078	21:49	P.pip	1	NS	F - Foraging			329		found on analysis	Yes
F079	21:50	P.pip	1	NS	C - Commuting			342		confirmed	Yes
F080	21:51	P.pip	1	NS	F - Foraging			343		found on analysis	Yes
F081	21:51	P.pip	1	NS	F - Foraging			345		found on analysis	Yes
F082	21:51	P.pip	1	NS	F - Foraging			346		found on analysis	Yes
F083	21:51	P.pip	1	NS	F - Foraging			349		found on analysis	Yes
F084	21:52	P.pip	1	NS	F - Foraging			350		found on analysis	Yes
F085	21:52	P.pip	1	NS	F - Foraging			354		found on analysis	Yes
F086	21:52	N.noc	1	NS	F - Foraging			356		found on analysis	Yes
F087	21:54	P.pip	1	NS	F - Foraging			380		confirmed	Yes
F088	21:54	P.pip	1	NS	F - Foraging			382		found on analysis	Yes
F089	21:56	P.pip	1	NS	F - Foraging			385		found on analysis	Yes
F090	22:00	P.pyg	1	NS	C - Commuting			431		changed track no.	Yes
F091	22:04	P.pip	1	NS	F - Foraging			445		changed track no.	Yes
F092	22:00	P.pip	1	NS	F - Foraging			446		found on analysis	Yes
F093	22:04	N.noc	1	NS	F - Foraging			447		found on analysis	Yes
F094	22:04	N.noc	1	NS	F - Foraging			448		found on analysis	Yes
F095	22:05	P.pip	1	NS	F - Foraging			455		found on analysis	Yes
F096	22:05	P.pip	1	NS	S - Socialising			458		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F097	22:06	P.pip	1	NS	S - Socialising			460		found on analysis	Yes
F098	22:06	P.pip	1	NS	S - Socialising			461		found on analysis	Yes
F099	22:08	P.pip	1	NS	C - Commuting			468		found on analysis	Yes
F100	22:07	P.pip	1	NS	C - Commuting			470		found on analysis	Yes
F101	22:07	P.pip	1	NS	C - Commuting			471		found on analysis	Yes
F102	22:08	P.pip	1	NS	C - Commuting			472		found on analysis	Yes
F103	22:08	P.pip	1	NS	C - Commuting			473		found on analysis	Yes
F104	22:08	P.pip	1	NS	C - Commuting			474		found on analysis	Yes
F105	22:08	P.pip	1	NS	C - Commuting			476		found on analysis	Yes
F106	22:08	N.noc	1	NS	C - Commuting			477		confirmed	Yes
F107	22:08	N.noc	1	NS	C - Commuting			478		found on analysis	Yes
F108	22:09	P.pip	1	NS	C - Commuting			479		found on analysis	Yes
F109	22:09	P.pip	1	NS	C - Commuting			481		found on analysis	Yes
F110	22:09	P.pip	1	NS	C - Commuting			482		found on analysis	Yes
F111	22:09	N.noc	1	NS	C - Commuting			483		found on analysis	Yes
F112	22:09	P.pip	1	NS	C - Commuting			484		found on analysis	Yes
F113	22:10	P.pip	1	NS	C - Commuting			485		found on analysis - Myotis spp. heard also	Yes
F114	22:10	N.noc	1	NS	C - Commuting			491		found on analysis	Yes
F115	22:11	P.pip	2	NS	F - Foraging			496		changed track no.	Yes
F116	22:11	P.pip	1	NS	F - Foraging			499		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F117	22:11	P.pip	1	NS	F - Foraging			500		found on analysis	Yes
F118	22:12	P.pip	1	NS	F - Foraging			502		found on analysis	Yes
F119	22:12	P.pip	1	NS	F - Foraging			503		found on analysis	Yes
F120	22:12	P.pip	1	NS	F - Foraging			504		found on analysis	Yes
F121	22:12	P.pip	1	NS	C - Commuting			505		Brown long-eared heard too	Yes
F122	22:12	P.pip	1	NS	F - Foraging			506		found on analysis	Yes
F123	22:13	P.pip	1	NS	F - Foraging			508		found on analysis	Yes
F124	22:13	P.pip	1	NS	F - Foraging			510		found on analysis	Yes
F125	22:16	P.pip	1	NS	F - Foraging			534		changed time	Yes
F126	22:16	P.pip	1	NS	F - Foraging			535		found on analysis	Yes
F127	22:17	P.pip	1	NS	S - Socialising			536		found on analysis	Yes
F128	22:17	P.pip	1	NS	F - Foraging			537		found on analysis	Yes
F129	22:18	P.pip	1	NS	F - Foraging			546		found on analysis	Yes
F130	22:18	P.pip	1	NS	F - Foraging			547		changed time	Yes
F131	22:19	P.pip	1	NS	F - Foraging			549		found on analysis	Yes
F132	22:19	P.pip	1	NS	F - Foraging			550		found on analysis	Yes
F133	22:19	P.pip	1	NS	F - Foraging			551		found on analysis	Yes
F134	22:19	P.pip	1	NS	F - Foraging			552		found on analysis	Yes
F135	22:20	P.pip	2	NS	F - Foraging			558		confirmed	Yes
F136	22:21	P.pip	1	NS	F - Foraging			559		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F137	22:21	P.pip	1	NS	F - Foraging			561		found on analysis	Yes
F138	22:22	N.noc	2	NS	F - Foraging			562		confirmed	Yes
F139	22:23	P.pip	1	NS	F - Foraging			564		found on analysis	Yes
F140	22:26	N.noc	1	NS	C - Commuting			592		found on analysis	Yes
F141	22:32	B.bar	1	NS	C - Commuting			618		found on analysis	Yes
F142	22:33	E.ser	1	NS	C - Commuting			619		found on analysis	Yes
F143	22:36	E.ser	1	NS	C - Commuting			640		found on analysis	Yes
F144	22:36	E.ser	1	NS	C - Commuting			641		found on analysis	Yes
F145	22:36	E.ser	1	NS	C - Commuting			643		found on analysis	Yes
F146	22:37	E.ser	1	NS	C - Commuting			645		found on analysis	Yes
F147	22:37	E.ser	1	NS	C - Commuting			646		found on analysis	Yes
F148	22:37	E.ser	1	NS	C - Commuting			647		found on analysis	Yes
F149	22:37	E.ser	1	NS	C - Commuting			648		found on analysis	Yes
F150	22:37	E.ser	1	NS	C - Commuting			649		found on analysis	Yes
F151	22:37	E.ser	1	NS	C - Commuting			650		found on analysis	Yes
F152	22:37	E.ser	1	NS	C - Commuting			651		found on analysis	Yes
F153	22:37	E.ser	1	NS	C - Commuting			652		found on analysis	Yes
F154	22:37	E.ser	1	NS	C - Commuting			655		found on analysis	Yes
F155	22:38	E.ser	1	NS	C - Commuting			658		found on analysis	Yes
F156	22:43	P.pip	1	NS	C - Commuting			695		changed track no.	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F157	22:43	P.pip	1	NS	C - Commuting			698		found on analysis	Yes
F158	22:49	P.pip	1	NS	C - Commuting			711		confirmed	Yes
F159	22:53	Pip sp.	2	NS	C - Commuting			730		confirmed	Yes
F160	22:53	P.pip	1	NS	C - Commuting			731		found on analysis	Yes
F161	22:54	P.pip	1	NS	C - Commuting			732		found on analysis	Yes
F162	22:54	P.pip	1	NS	C - Commuting			733		found on analysis	Yes
F163	22:54	P.pip	1	NS	C - Commuting			734		found on analysis	Yes
F164	22:54	P.pip	1	NS	C - Commuting			735		found on analysis	Yes
F165	22:54	P.pip	1	NS	C - Commuting			736		found on analysis	Yes
F166	22:54	P.pip	1	NS	C - Commuting			738		found on analysis	Yes
F167	22:55	P.pip	1	NS	C - Commuting			746		found on analysis	Yes
F168	22:55	P.pip	2	S	C - Commuting		3	747		Foraging above stream - confirmed	Yes
F169	22:55	P.pip	1	NS	F - Foraging			748		found on analysis	Yes
F170	22:56	P.pip	1	NS	F - Foraging			749		found on analysis	Yes
F171	22:56	P.pip	1	NS	F - Foraging			750		found on analysis	Yes
F172	22:56	P.pip	1	NS	F - Foraging			751		found on analysis	Yes
F173	22:57	P.pip	1	NS	F - Foraging			752		found on analysis	Yes
F174	22:57	P.pip	1	NS	F - Foraging			753		found on analysis	Yes
F175	22:57	P.pip	1	NS	F - Foraging			754		found on analysis	Yes
F176	22:57	P.pip	1	NS	F - Foraging			755		found on analysis	Yes

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Confirmed
F177	22:57	P.pip	1	NS	F - Foraging			759		found on analysis	Yes
F178	22:57	P.pip	1	NS	C - Commuting			760		found on analysis	Yes
F179	22:58	P.pip	1	NS	F - Foraging			761		found on analysis	Yes
F180	22:58	P.pip	1	NS	F - Foraging			762		found on analysis	Yes
F181	22:59	P.pip	1	NS	F - Foraging			769		found on analysis	Yes
F182	22:59	P.pip	1	NS	C - Commuting			770		confirmed	Yes
F183	22:59	P.pip	1	NS	F - Foraging			771		found on analysis	Yes
F184	22:59	P.pip	1	NS	F - Foraging			775		found on analysis	Yes
F185	23:03	N.noc	1	NS	C - Commuting			795		found on analysis	Yes
F186	23:03	N.noc	1	NS	C - Commuting			796		found on analysis	Yes

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference		Surveyor(s)		CW+JS		Survey type	BA1: Bat - Activity (transect)	Date	13/06/2017	
Survey Start (24 hours)	21:27	Survey End (24 hours)	00:27	Sunset	21:27	Sunrise		Detector / recording device type	Elekon batlogger			
Transect ID	F002	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)	16	Wind	0	Cloud Cover	1	Rain	0	Weather Conditions (Description)	Warm and clear evening			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001	21:30									Stop (1) 21:30, no obs, start 21:33		
F002	21:37									Stop (2), no obs, start 21:40		
F003	21:57	N.sp/E.ser	1	S	C - Commuting	W	4			Flying high commuting from East to West	N.noc	
F004	21:58	N.noc	1	NS	C - Commuting					Not Seen	N.noc	
F005	22:05									Stop (3), no obs, Start 22:08		
F006	22:16									Stop (4)		
F007	22:17	P.pyg	1	N/A	N/A	N/A	N/A			Very fast and quick, possibly pip	P.pyg	
F008										Start 22:19		
F009	22:26	P.pip						204		found on analysis		
F010	22:28	P.pip			C - Commuting			210		found on analysis		
F011	22:32	P.pip			C - Commuting			247		found on analysis		
F012	22:34	P.pip	1	NS	F - Foraging	N/A	N/A	260			P.pip	
F013	22:34	P.pip		NS	C - Commuting			261		found on analysis		
F014	22:35	P.pip	1	S	C - Commuting			264		Stop (5) - added in a pip		
F015	22:36	P.pip		NS	F - Foraging			267		found on analysis		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	22:37	P.pip	1	S	C - Commuting	S		268		Commuting over tree line	
F017										Start 22:38	
F018	22:38	P.pip	1	S	C - Commuting	W		271		Commuting field towards the West	P.pip
F019	22:38	P.pip	1		C - Commuting	S		272			
F020	22:39	P.pip	1		C - Commuting	S		275			
F021	22:39	P.pip	1		F - Foraging	S		276			
F022	22:39	P.pip	1		F - Foraging	S		276			
F023	22:39	P.pip		NS	F - Foraging			278		found on analysis	
F024	22:39	P.pip		NS	F - Foraging			279		found on analysis	
F025	22:40	P.pip		NS	F - Foraging			280		Feeding in trees on North hedge - *2 on map	
F026	22:40	P.pip		NS	F - Foraging			281		found on analysis	
F027	22:40	P.pip		NS	F - Foraging			282		found on analysis	
F028	22:40	P.pip		NS	F - Foraging			284		found on analysis	
F029	22:40	P.pip		NS	F - Foraging			286		found on analysis	
F030	22:43									Stop (6)	
F031	22:45	P.pip		NS	F - Foraging			319		found on analysis	
F032	22:45	P.pip		NS	C - Commuting	N/A	N/A			Commuting near field - changed the time	
F033										Start 22:46	
F034	22:54	Pip sp.		NS	F - Foraging			369_2		found on analysis	
F035	22:55	P.pip		NS	F - Foraging			375		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F036	22:56	P.pip		NS	C - Commuting	N/A	N/A	387		Commuting along lane to Henlade	
F037	22:57	P.pip		NS	C - Commuting	N/A	N/A	390		found on analysis	
F038	23:00	P.pip		NS	C - Commuting	N/A	N/A	406		found on analysis	
F039	23:00	P.pip		NS	C - Commuting	N/A	N/A	414		found on analysis	
F040	23:01	P.pip		NS	F - Foraging	N/A	N/A	417		In opposite field South of A358 near Henlade. South of Musgrave farm, 2 passes	
F041	23:00	P.pip		NS	C - Commuting	N/A	N/A	418		found on analysis	
F042	23:02	P.pip		NS	C - Commuting	N/A	N/A	419		found on analysis	
F043	23:02	P.pip		NS	C - Commuting	N/A	N/A	420		found on analysis	
F044	23:02	P.pip		NS	C - Commuting	N/A	N/A	421		found on analysis	
F045	23:04	P.pip		NS	C - Commuting	N/A	N/A	431		found on analysis	
F046	23:04	P.pip		NS	F - Foraging	N/A	N/A	435		found on analysis	
F047	23:07									Stop (7)	
F048	23:07	P.pip		NS	C - Commuting	N/A	N/A	462		found on analysis	
F049	23:08	P.pip		NS	F - Foraging	N/A	N/A	463		Feeding near but cannot see. Street lights along road	
F050	23:08	P.pip		NS	F - Foraging	N/A	N/A	467		found on analysis	
F051	23:08	P.pip		NS	F - Foraging	N/A	N/A	468		found on analysis	
F052	23:09	P.pip		S	F - Foraging	S	2	469		Foraging up and down Henlade Road, 3 passes	
F053	23:09	P.pip		NS	F - Foraging	N/A	N/A	470		found on analysis	
F054	23:10	P.pip		NS	F - Foraging	N/A	N/A	472		found on analysis	
F055	23:10	P.pip		NS	F - Foraging	N/A	N/A	473		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F056	23:10	P.pip		NS	F - Foraging	N/A	N/A	476		found on analysis	
F057										Start 23:10	
F058	23:11	P.pip		S	F - Foraging		2-1.5	483		Foraging up and down Henlade Road whilst we walked along for approx 4 mins - *3 on map	
F059	23:12	P.pip		NS	F - Foraging	N/A	N/A	487		found on analysis	
F060	23:12	P.pip		NS	C - Commuting	N/A	N/A	488		found on analysis	
F061	23:12	P.pip		NS	C - Commuting	N/A	N/A	489		found on analysis	
F062	23:13	P.pip		NS	C - Commuting	N/A	N/A	498		found on analysis	
F063	23:13	P.pip		NS	C - Commuting	N/A	N/A	499		found on analysis	
F064	23:13	P.pip		NS	C - Commuting	N/A	N/A	500		found on analysis	
F065	23:14	P.pip		NS	C - Commuting	N/A	N/A	501		found on analysis	
F066	23:15	P.pip		NS	C - Commuting	N/A	N/A	505		found on analysis	
F067	23:16	P.pip		NS	C - Commuting	N/A	N/A	511		found on analysis	
F068	23:16	P.pip		NS	C - Commuting	N/A	N/A	512		found on analysis	
F069	23:16	P.pip		NS	C - Commuting	N/A	N/A	514		found on analysis	
F070	23:16	P.pip		NS	C - Commuting	N/A	N/A	515		found on analysis	
F071	23:16	P.pip		NS	C - Commuting	N/A	N/A	518		found on analysis	
F072	23:16	P.pip		NS	C - Commuting	N/A	N/A	522		found on analysis	
F073	23:17	P.pip		NS	C - Commuting	N/A	N/A	524		found on analysis	
F074	23:17	P.pip		NS	C - Commuting	N/A	N/A	525		found on analysis	
F075	23:17	P.pip		NS	C - Commuting	N/A	N/A	526		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F076	23:19	P.pip		NS	F - Foraging	N/A	N/A	556		found on analysis	
F077	23:41									Stop (8) - no obs, 23:44	
F078	23:52	Unknown								Unsure, quick and sharp - no bats detected in analysis	
F079	23:59	Pip sp.		NS	F - Foraging	N/A	N/A	671		found on analysis	
F080	00:00	P.pip		NS	F - Foraging	N/A	N/A	674		found on analysis	
F081	00:00	P.pip		NS	F - Foraging	N/A	N/A	675		found on analysis	
F082	00:00	P.pip		NS	F - Foraging	N/A	N/A	676		found on analysis	
F083	00:00	P.pip		NS	F - Foraging	N/A	N/A	678		found on analysis	
F084	00:01	P.pip		NS	F - Foraging			679		Near M5, north of chicken farm (near culvert). Foraging continues for 2 mins	
F085	00:01	P.pip		NS	F - Foraging			680			found on analysis
F086	00:01	P.pip		NS	F - Foraging			681			found on analysis
F087	00:01	P.pip		NS	F - Foraging			682			found on analysis
F088	00:01	P.pip		NS	F - Foraging			683			found on analysis
F089	00:01	P.pip		NS	F - Foraging			684			found on analysis
F090	00:02	P.pip		NS	F - Foraging			685			found on analysis
F091	00:02	P.pip		NS	F - Foraging			686			found on analysis
F092	00:02	P.pip		NS	C - Commuting			689			found on analysis
F093	00:02	P.pip		NS	C - Commuting			690			found on analysis
F094	00:02	P.pip		NS	C - Commuting			691			found on analysis
F095	00:02	P.pip		NS	C - Commuting			692			found on analysis

BA1-BA4 BAT ACTIVITY SURVEY																	
Ecology ID		Land Parcel Reference		Various			Surveyor(s)		LB&EW		Survey type		BA1: Bat - Activity (transect)	Date	26/07/2017		
Survey Start (24 hours)		03:29	Survey End (24 hours)		05:29	Sunset	21:07		Sunrise		05:29		Detector / recording device type		Elekon batlogger		
Transect ID	F002	Transect start Eastings (X)		326015		Transect start Northings (Y)			124215		Transect end Eastings (X)		325845		Transect end Northings (Y)		124749
WEATHER CONDITIONS																	
Air Temperature (°C)		16		Wind		1	Cloud Cover		5		Rain		3		Weather Conditions (Description)		Mild and calm, dry at first until 4.40am then started light rain then became moderate rain towards end of survey
OBSERVATIONS																	
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)		Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result				
F001	03:36	P.pip	1	NS	C - Commuting		Unk	Unk	27	03:36	Point w on map.		P.pip				
F002	03:50	P.pip	1	NS	C - Commuting		Unk	Unk	50	03:50	SPOT COUNT POINT 3. Brief pass.		P.pip				
F003	03:51	N.sp/E.ser	1	NS	C - Commuting		Unk	Unk	53 & 54	03:51	SPOT COUNT POINT 3.		E.ser				
F004	04:00	P.pip	1	S	C - Commuting		E	5	62 & 70	04:02	Point i on map.		P.pip				
F005	04:05	P.pip	1	S	F - Foraging		S	5	80 - 86	04:05	Point h on map. Foraged up and down road then flew south.		P.pip				
F006	04:12	P.pip	1	S	F - Foraging		N/A	6	115 - 142	04:12	Point i on map. Flew back and forth.		P.pip				
F007	04:20	P.pip	1	S	C - Commuting		E	5	150 & 151	04:20	Point l on map.		P.pip				
F008	04:23	P.pyg	1	S	C - Commuting		E	7	154 & 155	04:23	Point m on map. 2 passes.		P.pyg				
F009	04:29	P.pip	1	NS	C - Commuting		Unk	Unk	167 & 168	04:29	SPOT COUNT POINT 5.		P.pip				
F010	04:29	N.noc	1	NS	C - Commuting		Unk	Unk	169	04:29	SPOT COUNT POINT 5.		N.noc				
F011	04:32	P.pip	1	NS	C - Commuting		Unk	Unk	179	04:32	Point x on map.		P.pip				
F012	04:35	P.pip	1	S	F - Foraging		Unk	3	185	04:35	Slightly north of point x. Flew from south to north, foraged with multiple passes then eventually flew south again.		P.pip				
	04:36	N/A	1	N/A	F - Foraging				192		added from analysis		P.pyg				
F013	04:38	P.pip	1	S	F - Foraging		W	4	197	04:38	SPOT COUNT POINT 6. Flew east to west and then back and forth with multiple passes.		P.pip				
F014	04:40	N.noc	1	NS	C - Commuting		Unk	Unk	210 - 213	04:40	SPOT COUNT POINT 6. Rain started at this point to continue for the rest of the survey.		N.noc				

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	04:40	N/A	1	N/A				215		added from analysis, faint	P.pip
F015	04:41	E.ser	1	NS	C - Commuting	Unk	Unk	216	04:41	SPOT COUNT POINT 6.	N.noc
F016	04:43	Unknown	1	S	C - Commuting	E	Unk	N/A	04:43	Bat seen but not heard. Flew from west to east across field.	N/A
										Are further surveys needed?	Yes

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	Various			Surveyor(s)		LB&EW		Survey type	BA1: Bat - Activity (transect)	Date	25/07/2017
Survey Start (24 hours)	21:07	Survey End (24 hours)	00:07	Sunset	21:07	Sunrise	05:29	Detector / recording device type	Elekon batlogger				
Transect ID	F002	Transect start Eastings (X)	326015	Transect start Northings (Y)	124215		Transect end Eastings (X)	325845	Transect end Northings (Y)	124749			
WEATHER CONDITIONS													
Air Temperature (°C)	18	Wind	0	Cloud Cover	3	Rain	0	Weather Conditions (Description)	Mild and calm				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:37	N.noc	1	NS	C - Commuting			219 - 222	21:37	Point a on map	N.noc		
F002	21:41	Pip sp.	2	S	F - Foraging	N	6	246 - 266	21:42	Point b on map. P.pip and P.pyg passes	Pip sp.		
F003	21:44	P.pyg	1	S	C - Commuting	N	7	265	21:44	Point c on map.	P.pyg		
F004	21:44	P.pip	1	S	C - Commuting	N	4	266 - 286	21:46	Point c on map. Multiple passes up and down hedgerow.	P.pip		
F005	21:47	P.pyg	1	S	C - Commuting	N	8	292	21:47	Point d on map.	P.pyg		
F006	21:52	Pip sp.	1	NS	C - Commuting			323, 331, 336	21:52	Point e on map.	P.pyg		
	21:52	N/A	1	N/A				329		added from analysis	N/A		
	21:55	N/A	1	N/A				338 - 343		added from analysis	P.pyg		
F007	21:56	N.noc	1	NS	C - Commuting			348, 352	21:56	Point f on map. Multiple passes.	N.noc		
F008	21:57	E.ser	1	S	F - Foraging	S	3	356-359	21:58	SPOT COUNT POINT 3. Foraged around surveyors back and forth. Came from the north and eventually flew towards the south. Called at 27KHz.	E.ser		
F009	22:08	P.pip	1	S	F - Foraging	N/A	4	388-420	22:08	Point g on map. Foraged around farmyard.	P.pip		
	22:08	N/A	2	N/A				299		With P.pip, added from analysis	M.sp.		
	22:07	N/A	1	N/A				391-394		added from analysis	N.noc		
F010	22:11	P.pip	1	S	C - Commuting	S	5	423, 429	22:11	Point h on map.	P.pip		
F011	22:12	N.sp.	1	NS	Unknown			433, 434	22:12	SPOT COUNT POINT 4. Called at 24KHz, unknown if Leisler's or Noctule.	N.noc		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F012	22:14	Pip sp.	2	S	F - Foraging	S	6	442 - 475	22:14	SPOT COUNT POINT 4. Foraged around street light and eventually flew from north to south. Multiple passes., P.pip and P.pyg. Social call heard once. Commuting from 474	Pip sp.
F013	22:20	N.noc	1	NS	C - Commuting			490	22:20	Point i on map..	N.noc
F014	22:20	P.pip	1	NS	F - Foraging			489 - 514	22:20	Point i on map. With N.noc 489, 491	P.pip
F015	22:25	P.pip	1	S	C - Commuting	S	5	528-542	22:26	Point j on map.	P.pip
F016	22:28	P.pip	1	S	C - Commuting	E	5	552, 555	22:28	Point k on map.	P.pip
F017	22:30	P.pyg	1	S	C - Commuting	E	6	566	22:30	Point l on map. 2 passes.	P.pyg
	22:31	N/A	1	N/A				568 - 588		until 22:34	P.pip
F018	22:36	Pip sp.	1	S	F - Foraging	E	5	595 - 608	22:35	Point n on map. Multiple passes.	P.pip
F019	22:39	N.sp/E.ser	1	NS	C - Commuting			614 & 615	22:39	Point m on map. Two call peak frequencies heard; 29KHz and 24KHz.	E.ser
F020	22:42	P.pip	1	NS	F - Foraging			629 - 639	22:42	SPOT COUNT POINT 5. Multiple passes.	P.pip
	22:42	N/A	1	N/A				640		added from analysis	P.pyg
F021	22:45	P.pip	1	S	F - Foraging	E	8	642 - 657	22:46	SPOT COUNT POINT 6. Multiple passes.	P.pip
F022	22:48	N.noc	1	NS	C - Commuting			661 - 663	22:48	SPOT COUNT POINT 6.	E.ser
F023	22:48	Unknown	1	NS	C - Commuting			664 - 682	22:48	SPOT COUNT POINT 6. until 22:52	P.pip
F024	22:54	P.pyg	1	NS	C - Commuting			686 - 697	22:54	Point o on map.	P.pip
F025	22:57	P.pip	1	S	C - Commuting	S	8	698, 699	22:57	Point p on map. With P.pip	M.sp.
F026	23:17	N.sp/E.ser	1	NS	C - Commuting			752 - 755	23:17	Point q on map. Two call peak frequencies heard; 21KHz and 27KHz.	N.lei
F027	23:18	R.hip	1	NS	C - Commuting			760	23:18	Point q on map.	R.hip
F028	23:20	N.noc	1	NS	C - Commuting			771	23:20	Point r on map.	N.noc
	23:23	N/A	1	N/A				779		added from Analysis - CHECK	P.pyg

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	23:24	N/A	1	N/A				780 - 781		added from analysis	E.ser
F029	23:27	P.pip	1	NS	C - Commuting			790		Point s on map.	P.pip
F030	23:33	N.sp/E.ser	1	NS	F - Foraging			806 - 808	23:33	Point t on map	N.lei
F031	23:33	P.pip	1	NS	F - Foraging			809 & 810	23:33	Point t on map.	P.pip
F032	23:37	P.pip	1	NS	C - Commuting			825	23:37	SPOT COUNT POINT 9. Brief pass	P.aur
F033	23:47	P.pip	1	NS	F - Foraging			893 - 919	23:47	Point u on map. Multiple passes.	P.pip
F034	23:49	N.noc	Unk	NS	C - Commuting			916	23:49	Point v on map. 2 passes.	N.noc
F036	23:50	N.sp/E.ser	1	NS	F - Foraging			923	23:50	Point v on map. Likely serotine bat.	N.lei
	23:50	P.pip	1	NS				926			P.pip
F037	23:52	N.sp/E.ser	1	NS	F - Foraging			929, 933, 935	23:52	Near point v on map. Calls at two peak frequencies heard, 24KHz and 27KHz, possible Leisler's bat. A few passes.	N.lei
F038	23:53	N.sp/E.ser	1	NS	F - Foraging			936	23:56	Point v on map.	N.noc
F039	00:01	N.noc	1	NS	F - Foraging			985	00:01	SPOT COUNT POINT 10. Continuous calls heard.	N.noc
F040	00:02	P.pip	1	NS	F - Foraging			1000	00:02	SPOT COUNT POINT 10. Few passes.	
										Are further surveys needed?	Yes

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	BAT TRANSECT 2			Surveyor(s)	AJ + LN		Survey type	BA1: Bat - Activity (transect)		Date	08/08/2017
Survey Start (24 hours)	20:47	Survey End (24 hours)	23:47	Sunset	20:47	Sunrise		Detector / recording device type	Anabat walkabout				
Transect ID	F002	Transect start Eastings (X)	326015	Transect start Northings (Y)	124215	Transect end Eastings (X)	325845	Transect end Northings (Y)	124749				
WEATHER CONDITIONS													
Air Temperature (°C)	16	Wind	0	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Overcast, cool and dry				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:10	P.pip	2	S	F - Foraging	N/A	3			Foraging in cow field-observed over fence. Plus P.pyg found during analysis	P.pip		
	21:14									Found during analysis	P.pip		
F002	21:19									STOP 9 - No Observations-Change of route due to cow field			
	21:21									Found during analysis	P.pip		
F003	21:28									STOP 10 - No Observations-Change of route due to cow field			
F004	22:04									STOP 8 - No Observations			
F005	22:15									STOP 7 - No Observations			
F006	22:31									STOP 6 - No Observations			
	22:32									Found during analysis	N.sp/E.ser		
F007	22:40									STOP 5 - No Observations			
F008	22:56									STOP 4			
F009	22:57	Unknown	1	NS	F - Foraging	N/A	N/A			Along road-Stop 4.	E.ser		
	23:01									Found during analysis	P.pip		
	23:04									Found during analysis	P.pip		
F010	23:12									STOP 3			
F011	23:12	M.sp.	1	NS	F - Foraging	N/A	N/A			STOP 3 by footpath gate	M.sp.		

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference	Transect 2			Surveyor(s)	JPS and JD		Survey type	BA1: Bat - Activity (transect)			Date	05/09/2017		
Survey Start (24 hours)	19:49	Survey End (24 hours)	22:49	Sunset	19:49	Sunrise	Detector / recording device type and number			Anabat walkabout						
Transect ID	F002	Transect start Eastings (X)	Transect start Northings (Y)			Transect end Eastings (X)	Transect end Northings (Y)									
WEATHER CONDITIONS																
Air Temperature (°C)	16	Wind	2	Cloud Cover	0	Rain	0	Weather Conditions (Description)	Clear with light breeze							
OBSERVATIONS																
Point Counts	1	Start: 20:01 Finish: 20:04	2	Start: 20:10 Finish: 20:14	3	Start: 20:22 Finish: 20:25	4	Start: 20:41 Finish: 20:45	5	Start: 21:17 Finish: 21:20	6	Start: 21:27 Finish: 21:30	7	Start: 21:39 Finish: 21:42	8	Start: 21:47 Finish: 21:51
	9	Start: 22:12 Finish: 22:15	10	Start: 22:39 Finish: 22:49												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result				
F001	20:15	P.pip	1	NS	C - Commuting						Heard only, commuting	P.pip				
F002	20:18	P.pip	1	S	F - Foraging	SE	1 TO 2				Foraging very low 1-2m up and down hedgerow for 2 mins	Pip sp.				
F003	20:22	Pip sp.	2	S	F - Foraging	N/A	2 TO 3			3	soprano pip both foraging around hedgerow at stop 3 in circular motion. S.pip h	P.pip				
F004	20:26	Pip sp.	3	S	C - Commuting	NW	3 TO 4				2 common pips and 1 soprano pip commuting NW along hedgerow	P.pip				
F005	20:30	P.pip	1	NS	C - Commuting						Heard only briefly					
F006	20:53	P.pip	1	NS	Unknown						Heard only on edge of hedgerow	B.bar				
F007	20:59	P.pip	1	NS	Unknown					3	Heard only by stop 3	P.pip				
F008	21:02	P.pip	1	NS	Unknown						Heard only near F001	P.pip				
F009	21:59	P.pip	1	NS	Unknown					2	Heard briefly near stop 2	P.pip				
F010	22:06	P.pip	1	NS	Unknown					1	Heard only near stop 1	P.pip				
F011	22:13	P.pyg	1	NS	S - Socialising					9	Heard only, loud socialising at stop 9	P.pyg				
F012	22:20	P.pip	1	NS	Unknown						Heard only briefly	P.pip				
F013	22:31	N.sp/E.ser	1	NS	Unknown						Heard only quiet	N.noc				
F014	22:35	N.sp/E.ser	1	NS	F - Foraging						Heard only on verge of A358	N.sp.				

BA1-BA4 BAT ACTIVITY SURVEY																	
Ecology ID		A358_Transect_2_031017_dusk		Land Parcel Reference		Transect 2			Surveyor(s)		AM , CD		Survey type	BA1: Bat - Activity (transect)		Date	03/10/2017
Survey Start (24 hours)		18:46		Survey End (24 hours)		21:46	Sunset	18:46		Sunrise		Detector / recording device type		Elekon batlogger			
Transect ID	F002	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)							
WEATHER CONDITIONS																	
Air Temperature (°C)		12		Wind		1	Cloud Cover	2	Rain	0		Weather Conditions (Description)	cool and bright with high clouds				
OBSERVATIONS																	
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)		Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result				
F001	19:13	P.pip	1	NS	C - Commuting				87-95				P.pyg				
F002	19:43	P.pyg	1	NS	C - Commuting				160				P.pyg				
F003	19:54	P.pip	1	NS	C - Commuting				192				P.pip				
	20:19	P.aur	1	NS	C - Commuting				256,258		heard in analysis		P.aur				
F004	Temp at 8 degrees celcius 20:06																
F005	20:20	E.ser	1	NS	C - Commuting				260		Not recorded		Unknown				
F006	21:02	P.pyg	1	S	C - Commuting				387				P.pyg				
F007	21:14	E.ser	1	NS	C - Commuting				415				E.ser				
F008																	
F009																	
F010																	
F011																	
F012																	
F013																	
F014																	

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference		A358 - BAT TRANSECT 4		Surveyor(s)		RM & AM & AS		Survey type		Date
										BA1: Bat - Activity (transect)		06/04/2017
Survey Start (24 hours)		Survey End (24 hours)		Sunset		Sunrise		Detector / recording device type		BatLogger SOUTS Office - D1		
19:58		22:12		19:53								
Transect ID	F004	Transect start Eastings (X)	329139	Transect start Northings (Y)		121629		Transect end Eastings (X)		329124	Transect end Northings (Y)	
												121634
WEATHER CONDITIONS												
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)				
11		0		0		0		Dry calm cool				
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result
F001	20:07									STOP 1 - Nothing		
F002	20:22	Noctule	1	NS	F			53		found on analysis		amended
F003	20:23	Noctule	1	NS	F			56		found on analysis		amended
F004	20:24	Noctule	1	S	F			58		STOP 2 - circling - added in track no.		amended
F005	20:24	Noctule	1	NS	F			59		found on analysis		amended
F006	20:25	P.pyg	1	NS	F			62		STOP 2 - added in track no.		amended
F007	20:29	P.pip	1	NS	C			78		found on analysis		amended
F008	20:37	P.pip	1	NS	F			99		found on analysis		amended
F009	20:37	P.pip	1	NS	F			100		found on analysis		amended
F010	20:37	P.pip	1	NS	F			101		found on analysis		amended
F011	20:39	P.pip	1	NS	F			106		Circling - See map (1) - added in track no.		amended
F012	20:39	P.pip	1	NS	C			107		found on analysis		amended
F013	20:39	P.pip	1	NS	C			108		found on analysis		amended
F014	20:39	P.pip	1	NS	C			109		found on analysis		amended
F015	20:40	P.pip	1	NS	C			110		found on analysis		amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F016	20:40	P.pip	1	NS	C			111		found on analysis	amended	
F017	20:40	P.pip	1	NS	F			112		See F005 above - added in track no.	amended	
F018	20:40	P.pip	1	NS	C			113			found on analysis	amended
F019	20:40	P.pip	1	NS	C			114			found on analysis	amended
F020	20:40	P.pip	1	NS	C			115			found on analysis	amended
F021	20:40	P.pip	1	NS	C			116			found on analysis	amended
F022	20:41	P.pip	1	NS	C			117			See map (2) - added in track no.	amended
F023	20:43									STOP 3 - nothing		
F024	20:45	P.pip	1	NS	C			123		STOP 3 -found on analysis	amended	
F025	20:46	P.pyg	1	NS	C			126		STOP 3 - changed time and added in track no.	amended	
F026	20:47	P.pip	1	NS	C			131		found on analysis	amended	
F027	20:47	P.pip	1	NS	C			132		found on analysis	amended	
F028	20:47	P.pip	1	NS	C			134		found on analysis	amended	
F029	20:47	P.pip	1	NS	C			135		found on analysis	amended	
F030	20:48	P.pip	1	NS	C			136		found on analysis	amended	
F031	20:48	P.pip	1	NS	C			137		found on analysis	amended	
F032	20:48	P.pip	1	NS	C			138		found on analysis	amended	
F033	20:48	P.pip	1	NS	C			139		found on analysis	amended	
F034	20:48	P.pip	2	NS	C			140		See map (3) and (4) - deleted P.pyg only heard one call	amended	
F035	20:51	E.ser	1	NS	C			146		See map (3) and (4) - added in track no.	amended	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F036	20:51	P.pip	1	NS	C			147		found on analysis	amended
F037	20:54	M.sp	1	NS	C			155		found on analysis -	amended
F038	20:56									STOP 4	
F039	20:59	P.pyg	1	NS	C			165		STOP 4 - added in species and track no.	amended
F040	21:06	P.pip	1	NS	C			192_2		found on analysis	amended
F041	21:07	E.ser	1	NS	C			198		found on analysis	amended
F042	21:07	E.ser	1	NS	C			199		found on analysis	amended
F043	21:07	Sop Pip	1	NS	C					Between STOP 4 and STOP 5 - couldn't find anything	NR
F044	21:10									STOP 5 - nothing	
F045	21:16	E.ser	1	NS	C			224		found on analysis	amended
F046	21:16	E.ser	1	NS	C			225		found on analysis	amended
F047	21:16	E.ser	1	NS	C			226		found on analysis	amended
F048	21:17	E.ser	1	NS	C			228		found on analysis	amended
F049	21:17	E.ser	1	NS	F			229		Between STOP 5 and STOP 6 - changed the species from M.sp to E.ser but not 100% sure	amended
F050	21:19	E.ser	1	NS	F			229		found on analysis, not really sure if it is E.ser	amended
F051	21:24	E.ser	1	NS				258		Between STOP 5 and STOP 6 - not really sure if it is E.ser	amended
F052	21:26	E.ser	1	NS	F			262		Between STOP 5 and STOP 6 - added species and track no.	amended
F053	21:26	E.ser	1	NS	F			264		found on analysis, not really sure if it is E.ser	amended
F054	21:26	E.ser	1	NS	F			267		found on analysis, not really sure if it is E.ser	amended
F055	21:27	E.ser	1	NS	F			268		found on analysis, not really sure if it is E.ser	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F056	21:30									STOP 6 - nothing	amended
F057	21:30	P.pip	1	NS	C			283		At Stop 6 - added track no.	amended
F058	21:30	P.pip	1	NS	C			284		found on analysis	amended
F059	21:31	P.pip	1	NS	C			285		found on analysis	amended
F060	21:32	E.ser	1	NS	F			291		At Stop 6 - added track no.	amended
F061	21:32	E.ser	1	NS	F			292		found on analysis	amended
F062	21:32	E.ser	1	NS	F			295		found on analysis	amended
F063	21:37	E.ser	1	NS	F			313		found on analysis	amended
F064	21:37	E.ser	1	NS	F			314		found on analysis	amended
F065	21:37	P.pyg	1	NS	C			316		found on analysis	amended
F066	21:38	P.pyg	1	NS	C			317		found on analysis	amended
F067	21:38	P.pyg	1	NS	C			318		found on analysis	amended
F068	21:38	Lesser Horseshoe	1	NS	C			319		STOP 7 - Location map, see * Freq = 110Hz - added in track no.	amended
F069	21:38	P.pyg	1	NS	C			322		found on analysis	amended
F070	21:38	P.pyg	1	NS	C			323		found on analysis	amended
F071	21:38	N.noc	1	NS	C			324		found on analysis	amended
F072	21:38	E.ser	1	NS	C			325		found on analysis	amended
F073	21:39	E.ser	1	NS	C			326		found on analysis	amended
F074	21:39	E.ser	1	NS	C			327		found on analysis	amended
F075	21:39	E.ser	1	NS	C			328		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F076	21:39	E.ser	1	NS	C			329		found on analysis	amended
F077	21:39	P.pyg	1	NS	C			330		found on analysis	amended
F078	21:39	P.pyg	1	NS	C			331		found on analysis	amended
F079	21:39	P.pyg	1	NS	C			332		found on analysis	amended
F080	21:40	P.pyg	2	NS	C			333		found on analysis - either a E.ser or N.lei	amended
F081	21:40	P.pyg	1	NS	C			334		found on analysis	amended
F082	21:40	P.pyg	1	NS	C			335		found on analysis	amended
F083	21:40	P.pyg	1	NS	C			336		found on analysis	amended
F084	21:40	P.pyg	1	NS	C			337		found on analysis	amended
F085	21:40	P.pyg	1	NS	C			339		found on analysis	amended
F086	21:41	P.pyg	1	NS	C			340		found on analysis	amended
F087	21:41	P.pyg	1	NS	C			342		found on analysis - not 100% sure	amended
F088	21:41	P.pyg	1	NS	C			343		found on analysis	amended
F089	21:41	P.pyg	1	NS	C			344		found on analysis	amended
F090	21:41	P.pyg	1	NS	C			345		found on analysis	amended
F091	21:57									Stop 9 - nothing	
F092	22:00									Stop 10 - nothing	
F093											
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID		Land Parcel Reference		Surveyor(s)		DB JD		Survey type		BA1: Bat - Activity (transect)		Date			
Survey Start (24 hours)		20:58	Survey End (24 hours)		23:02	Sunset	20:59		Sunrise	Detector / recording device type		Elekon batlogger			
Transect ID	F004	Transect start Eastings (X)		329129		Transect start Northings (Y)		121611		Transect end Eastings (X)		329129	Transect end Northings (Y)		121611
WEATHER CONDITIONS															
Air Temperature (°C)		11		Wind		1	Cloud Cover		5	Rain		0	Weather Conditions (Description)		Mild and Dry
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result			
F001	21:14	N.noc	1	S	F - Foraging	S	20	24				N.noc			
F002	21:24	P.pip	1	NS	C - Commuting			46				P.pip			
F003	21:27	N.noc	1	NS	C - Commuting			55		Briefly heard		N.noc			
F004	21:28	N.noc	1	NS	C - Commuting			66				N.noc			
	21:31									Found during analysis		P.pip			
	21:33									Found during analysis		N.noc			
F005	21:33	E.ser	2	S	F - Foraging		10	74		Foraging in circles. Likely previous noctule foraging in cluttered environment		N.noc			
F006	21:37	N.noc	1	S	C - Commuting	SE		97				N.noc			
F007	21:42	N.noc	2	NS	C - Commuting			112				N.noc			
F008	21:44	Pip sp.	1	S	C - Commuting	N	3	126		P. pyg and P. pip found during analysis		P.pyg			
	21:47									Found during analysis		N.noc			
F009	21:50	P.pip	1	S	C - Commuting	W	8	143				P.pip			
F010	21:52	P.pyg	1	S	F - Foraging	W	2	156				P.pyg			
F011	21:54	P.pip	1	S	C - Commuting	W	8	161				P.pip			
F012	21:58	P.pip	1	S	C - Commuting	N	2	186				P.pip			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F013	22:02	P.pip	1	NS	C - Commuting			196			P.pip
F014	22:08	P.pip	1	NS	F - Foraging			214			P.pip
F015	22:11	Unknown	1	NS	C - Commuting			228		Not recorded	Unknown
	22:14									Found during analysis	P.pyg
F016	22:18	P.pip	1	NS	F - Foraging			255			P.pip
F017	22:24	P.pyg	1	NS	F - Foraging			283		Not recorded	Unknown
	22:28									Found during analysis	P.pyg
	22:31	B.bar	1	NS	F - Foraging			288-290		Found during analysis	B.bar
F018	22:31	E.ser	1	NS	F - Foraging			289			N.noc
F019	22:34	P.pip	1	NS	F - Foraging			296			P.pip
F020	22:42	P.pip	1	NS	F - Foraging			309			P.pip
F021	22:45	P.pip	1	NS	F - Foraging			323			P.pip
F022	22:52	P.pip	1	NS	F - Foraging			336			P.pip
	22:54									Found during analysis. Myotis followed by P. pip on same file	M.sp.
F023	22:57	Unknown	1	NS	F - Foraging			353			E.ser
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference		Surveyor(s)		CW+JS		Survey type	BA1: Bat - Activity (transect)	Date	15/06/2017	
Survey Start (24 hours)	21:28	Survey End (24 hours)	00:28	Sunset	21:28	Sunrise		Detector / recording device type	Elekon batlogger			
Transect ID	F004	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)	15	Wind	1	Cloud Cover	2	Rain	0	Weather Conditions (Description)	Cool summer's evening			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001	21:28									Stop (1), no obs. Start 21:31		
F002	21:40									Stop (2), no obs. Start 21:43		
F003	21:55	P.pyg	1	S	C - Commuting	W	3	109		Seen flying towards hedge trees on West Hatch Lane -changed from Pip.sp to P.pyg		
F004	21:55	P.pyg	1	NS	F - Foraging			111		found on analysis		
F005	21:56	P.pyg	1	S	F - Foraging	S	2	115		Feeding along West Hatch Lane - added track no.		
F006	21:55	P.pyg	1	NS	F - Foraging			116		found on analysis		
F007	21:57	P.pyg	1	NS	F - Foraging			117		found on analysis		
F008	21:57	P.pyg	1	NS	F - Foraging			118		found on analysis		
F009	21:57	P.pyg	1	NS	F - Foraging			119		found on analysis		
F010	21:57	P.pip	1	NS	F - Foraging			120		found on analysis		
F011	21:57	P.pyg	1	NS	F - Foraging			121		found on analysis		
F012	21:57	P.pyg	1	NS	F - Foraging			122		found on analysis		
F013	21:57	P.pyg	1	NS	F - Foraging			123		found on analysis		
F014	21:57	P.pyg	1	NS	F - Foraging			124		found on analysis		
F015	22:01	P.pyg	1	NS	Unknown			145		Quick short blast - added track no.		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	22:01	P.pyg	1	NS	F - Foraging			151		found on analysis	
F017	22:04	E.ser	1	S	C - Commuting	W	2	160		Along hedge adjacent to A358 - frequency 34 - added in species	
F018	22:05	P.pip	1	NS	C - Commuting			166		found on analysis	
F019	22:06	E.ser	2	S	C - Commuting	E	2	173		Commuting along hedge as above & P.pip	
F020	22:11	E.ser	1	S	F - Foraging	W	2	184		Commuting and feeding along hedge as above - *1 on map - added in track no.	
F021	22:11	E.ser	1	NS	F - Foraging			185		found on analysis	
F022	22:12	E.ser	1	NS	F - Foraging			186		found on analysis	
F023	22:14	P.pyg	1	NS	Unknown	N/A	N/A	193		Not seen - added track no. & species	
F024	22:14	P.pip	1	NS	F - Foraging			194		found on analysis	
F025	22:16	P.pip	1	NS	C - Commuting			204		found on analysis	
F026	22:16	P.pip	1	NS	C - Commuting			205		found on analysis	
F027	22:21	P.pyg	1	NS	C - Commuting			233		found on analysis	
F028	22:21	P.pyg	1	NS	C - Commuting			234		found on analysis	
F029										Drove to Scout camp due to horse	
F030	22:22	M.sp.	1	NS	C - Commuting			245		found on analysis	
F031	22:23	P.pyg	1	S	C - Commuting	S	2	246		Along lane at scout camp - added track no.	
F032	22:24	P.pyg	1	S	F - Foraging		2	248		Feeding along road into camp under scout sign - *2 - added track no.	
F033	22:24	P.pyg	1	NS	F - Foraging			249		found on analysis	
F034	22:24	P.pyg	1	NS	F - Foraging			251		found on analysis	
F035	22:24	P.pyg	1	NS	F - Foraging			252		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F036	22:24	P.pyg	1	NS	F - Foraging			253		found on analysis	
F037	22:24	P.pyg	1	NS	F - Foraging			254		found on analysis	
F038	22:25	P.pyg	1	NS	F - Foraging			255		found on analysis	
F039	22:25	P.pyg	1	NS	F - Foraging			256		found on analysis	
F040	22:25	P.pyg	1	NS	F - Foraging			257		found on analysis	
F041	22:25	P.pyg	1	NS	F - Foraging			258		found on analysis	
F042	22:26	P.pyg	1	NS	F - Foraging			261		found on analysis	
F043	22:26	P.pyg	1	NS	F - Foraging			262		found on analysis	
F044	22:30	Unknown	1	NS	F - Foraging			286		found on analysis - unsure if it is a bat or not	
F045	22:31	Unknown	1	NS	F - Foraging	N/A	N/A	290		Along track in campsite to the NW of site - changed species to unknown from Pip.sp as it is a lower frequency	
F046	22:32	P.pip	1	NS	C - Commuting	N/A	N/A	290		Along track in campsite to the NW of site - added track no	
F047	22:33									Stop (3) No obs, Start 22:40	
F048	22:48									Stop (4)	
F049	22:48	P.pip	1	NS	C - Commuting			359		found on analysis	
F050	22:49	P.pip	1	NS	F - Foraging	N/A	N/A	361		added in track no.	
F051										Start 22:54	
F052	23:01									Stop (5), no obs, Start 23:06	
F053	23:10	P.pyg	1	NS	C - Commuting	N/A	N/A	434		At bottom of south copse in East corner - added in track no.	
F054	23:16									Stop (6)	
F055	23:17	P.pip	1	NS	C - Commuting	N/A	N/A	462		At West bottom corner of South copse - added in track no.	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F056	23:18	P.pip	1	NS	C - Commuting	N/A	N/A	464		found on analysis	
F057	23:19	P.pip	1	NS	C - Commuting	N/A	N/A	466		At West bottom corner of South copse - added in track no.	
F058	23:20	P.pip	1	NS	C - Commuting	N/A	N/A	470		At West bottom corner of South copse - added in track no.	
F059										Start 23:22	
F060	23:24	P.pip	1	NS	F - Foraging	N/A	N/A	480		Along drive to scout camp - added in track on.	
F061	23:24	P.pip	1	NS	F - Foraging	N/A	N/A	482		found on analysis	
F062	23:25	P.pip	1	NS	C - Commuting	N/A	N/A	491		found on analysis	
F063	23:26	P.pip	1	NS	C - Commuting	N/A	N/A	492		Along drive to scout camp - added in track no. and changed species from P.pyg to P.pip	
F064	23:26									Stop (7)	
F065	23:26	P.pyg	1	NS	C - Commuting	N/A	N/A	496		Short and sharp - added in track no.	
F066	23:27	P.pip	1	NS	F - Foraging	N/A	N/A	497		Feeding in trees along road - added in track no.	
F067	23:27	P.pip	1	NS	F - Foraging	N/A	N/A	498		found on analysis	
F068	23:27	P.pip	1	NS	F - Foraging	N/A	N/A	499		found on analysis	
F069	23:27	P.pip	1	NS	F - Foraging	N/A	N/A	500		found on analysis	
F070	23:29	P.pip	1	NS	F - Foraging	N/A	N/A	502		Feeding in trees along road for approx. 2 mins - added in track no.	
F071	23:29	P.pyg	1	NS	F - Foraging	N/A	N/A	503		found on analysis	
F072	23:29	M.sp.	1	NS	F - Foraging	N/A	N/A	504		found on analysis	
F073	23:30	P.pip	1	NS	F - Foraging	N/A	N/A	505		found on analysis	
F074	23:30	P.pyg	1	NS	F - Foraging	N/A	N/A	506		found on analysis	
F075	23:30	P.pyg	1	NS	F - Foraging	N/A	N/A	507		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F076	23:30	P.pip	1	NS	F - Foraging	N/A	N/A	508		found on analysis	
F077	23:31	P.pip	1	NS	F - Foraging	N/A	N/A	509		found on analysis	
F078	23:31	P.pip	1	NS	F - Foraging	N/A	N/A	510		found on analysis	
F079	23:31	P.pip	1	NS	F - Foraging	N/A	N/A	511		found on analysis	
F080										Start at 23:32	
F081	23:34	P.pip	1	NS	C - Commuting	N/A	N/A	517		Short and sharp in field near depot - changed time and added track no.	
F082	23:35	P.pip	1	NS	F - Foraging	N/A	N/A	518		Feding along tree line of wood in field - *4 - added track no.	
F083	23:35	P.pip	1	NS	F - Foraging	N/A	N/A	521		found on analysis	
F084	23:35	P.pip	1	NS	F - Foraging	N/A	N/A	522		found on analysis	
F085	23:35	P.pip	1	NS	F - Foraging	N/A	N/A	523		found on analysis	
F086	23:36	N.noc	2	NS	F - Foraging	N/A	N/A	524		Feding along tree line of wood in field - *4 - added track no. Maybe n.lei also?	
F087	23:38	N.lei	1	NS	F - Foraging	N/A	N/A	526		Feding along tree line of wood in field - *4 - changed from N.noc to N.lei & added track no.	
F088	23:37	N.lei	1	NS	F - Foraging	N/A	N/A	526		found on analysis	
F089	23:38	N.noc	1	NS	F - Foraging	N/A	N/A	527		Feding along tree line of wood in field - *4 - added track no.	
F090	23:37	P.pip	1	NS	F - Foraging	N/A	N/A	528		found on analysis	
F091	23:41									Stop (8)	
F092	23:42	P.pip	1	NS	F - Foraging	N/A	N/A	539		Foraging along woodland edge - added in track no.	
F093	23:42	P.pip	1	NS	F - Foraging	N/A	N/A	540		found on analysis	
F094	23:43	P.pip	1	NS	F - Foraging	N/A	N/A	542		found on analysis	
F095										Start 23:48	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F096	23:52	P.pip	1	NS	F - Foraging	N/A	N/A	561		found on analysis	
F097	23:52	P.pip	1	NS	F - Foraging	N/A	N/A	562		found on analysis	
F098	23:53	P.pip	1	NS	F - Foraging	N/A	N/A	563		found on analysis	
F099	23:54	P.pip	1	NS	F - Foraging	N/A	N/A	564		found on analysis	
F100	23:55	P.pip	1	NS	F - Foraging	N/A	N/A	578		found on analysis	
F101	23:55	P.pip	1	NS	F - Foraging	N/A	N/A	582		found on analysis	
F102	23:57	P.pip	1	NS	F - Foraging	W		595		Along drive up into campsite (repeat of wood) - added in track no.	
F103	23:57	P.pip	1	NS	F - Foraging	W		597		found on analysis	
F104	23:58	P.pip	1	NS	F - Foraging	W		598		found on analysis	
F105	23:58	P.pip	1	NS	F - Foraging	W		606		found on analysis	
F106	23:59	P.pyg	1	NS	F - Foraging	W		607		found on analysis	
F107	23:59	P.pyg	1	NS	F - Foraging	W		617		found on analysis	
F108	00:02	P.pip	1	NS	F - Foraging			651		In open reception area of camp - added track no.	
F109	00:02	P.pip	1	NS	F - Foraging			653		found on analysis	
F110	00:03	P.pip	1	NS	F - Foraging			654		found on analysis	
F111	00:03									Stop (9)	
F112	00:03	P.pip	1	NS	F - Foraging			656		In open reception area of camp - added track no.	
F113	00:03	P.pip	1	NS	F - Foraging			657		found on analysis	
F114	00:03	P.pip	1	NS	F - Foraging			658		found on analysis	
F115	00:04	P.pip	1	NS	F - Foraging			659		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F116	00:04	P.pip	1	NS	F - Foraging			662		found on analysis	
F117	00:04	P.pip	1	NS	F - Foraging			663		found on analysis	
F118	00:05	P.pip	1	NS	F - Foraging			664		found on analysis	
F119	00:05	P.pip	1	NS	F - Foraging			665		found on analysis	
F120	00:07									Start	
F121	00:09	P.pyg	1	NS	F - Foraging			679		found on analysis	
F122	00:12	P.pyg	1	NS	F - Foraging			686		found on analysis	
F123	00:12	P.pyg	1	NS	F - Foraging			697		found on analysis	
F124	00:12	P.pyg	1	NS	F - Foraging			698		found on analysis	
F125	00:14	P.pip	1	NS	F - Foraging			716		found on analysis	
F126	00:14	P.pip	1	NS	F - Foraging			717		found on analysis	
F127	00:14	P.pip	1	NS	F - Foraging			718		found on analysis - also P.pyg	
F128	00:15	P.pip	1	NS	F - Foraging			722		found on analysis	
F129	00:15	P.pip	1	NS	F - Foraging			723		found on analysis	
F130	00:15	P.pip	1	NS	F - Foraging			724		found on analysis	
F131	00:15	P.pyg	1	NS	F - Foraging			725		found on analysis	
F132	00:17	P.pip	1	NS	F - Foraging			731		found on analysis	
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY																											
Ecology ID		Land Parcel Reference		Transect 4			Surveyor(s)		AJ&NW		Survey type		BA1: Bat - Activity (transect)		Date												
Survey Start (24 hours)		03:30		Survey End (24 hours)		05:30		Sunset		Sunrise		05:12		Detector / recording device type and number		Elekon batlogger											
Transect ID		F002		Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)															
WEATHER CONDITIONS																											
Air Temperature (°C)		18		Wind		2		Cloud Cover		6		Rain		Weather Conditions (Description)		Mild dry overcast											
OBSERVATIONS																											
Point Counts																											
Observation no. (align with map)		Time (24 hours)		Species		No. of bats		Seen (S) / Not Seen (NS)		Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)		Direction of flight		Approx. Flight Height (m)		Track no.		Track time		Point Count number		Notes		Sound analysis result			
F001 Stop 1		02:51		P.pip		1		S		F		N						43				Foraging up and down hedgerow		Confirmed			
F002		02:56		s.pip		1		NS		C		n/a								5				HNS		Confirmed	
F003		02:58		c.pip		1		NS		C		n/a								14		3		HNS		Confirmed	
F004		03:04		c.pip		1		NS		F		n/a								56				HNS		Confirmed	
F005		03:05		Myotis spp.		1		NS		C		n/a								62				HNS		Amended	
F006 stop 2		03:13		C.pip		1		NS		C		n/a								122				HNS		No calls at this time	
F007		03:17		Myotis spp.		1		NS		C		n/a								128		3		Unkwown barb/serotine		Amended	
F008		03:28		C.pip		1		S		C		n/a								198				Foraging up and down hedgerow		Confirmed	
		03:28		Myotis spp.		1		NS		C		n/a										2				Found in analysis	
F009 stop 3		03:48										n/a										1					
F010		03:58		serotine		1		NS		C		n/a								340		9		HNS		No calls at this time	
F011		04:01		c.pip		1		NS		C		n/a								372				HNS		Confirmed	
F012 stop 4		04:06										n/a															
		04:20		s.pip		1		NS																		Found in analysis	

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID		Land Parcel Reference		Transect 4			Surveyor(s)		AJ&NW		Survey type		Date		
Survey Start (24 hours)		21:24		Survey End (24 hours)		00:24	Sunset	21:24		Sunrise		Detector / recording device type and number		Elekon batlogger	
Transect ID	F002	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS															
Air Temperature (°C)		24		Wind		2	Cloud Cover	6		Rain		Weather Conditions (Description)		Mild dry overcast	
OBSERVATIONS															
Point Counts															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result			
F001 Stop 1	21:26														
F002	21:35	c.pip	1	NS	C				55		HNS				
F003	21:39	s.pip	1	S	F				71	3	4M Foraging along edge of woodland				
F004 stop 2	21:45	c.pip	1	NS	C				134						
F005	21:56	c.pip	1	S	C	NE			210		2m Commuting north East along road				
F006 stop 3	22:14														
F007	22:17	s.pip	1	NS	C				17	3	HNS				
F008	22:22	c.pip	1	NS	C				30		HNS				
F009 stop 4	22:24									2					
F010	22:28	c.pip	1	NS	C				52	1	HNS				
F011	22:31	Noctule	1	NS	C				67	9	HNS				
F012	22:35	c.pip	1	NS	C				84		HNS				
F013	22:48	Serotine	1	NS	C				112		HNS				
F014	22:59	c.pip	1	NS	C				121		HNS				

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference	Multiple			Surveyor(s)	JD AS		Survey type	BA1: Bat - Activity (transect)			Date	06/09/2017		
Survey Start (24 hours)	19:47	Survey End (24 hours)	22:47	Sunset	19:47	Sunrise	Detector / recording device type and number			Elekon batlogger						
Transect ID	F004	Transect start Eastings (X)	329135	Transect start Northings (Y)	121596		Transect end Eastings (X)	329135		Transect end Northings (Y)	121596					
WEATHER CONDITIONS																
Air Temperature (°C)	15	Wind	1	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Drizzle at start and heavy rain before survey. Dry throughout, calm, and cool.							
OBSERVATIONS																
Point Counts	1	Start: 21:53 Finish: 21:56	2	Start: 22:02 Finish: 22:05	3	Start: 22:20 Finish: 22:13	4	Start: 21:31 Finish: 21:46	5	Start: 21:17 Finish: 21:23	6	Start: 21:07 Finish: 21:10	7	Start: 20:52 Finish: 20:55	8	Start: 20:44 Finish: 20:47
	9	Start: 20:24 Finish: 20:27	10	Start: 19:57 22:27 Finish: 20:00 22:30												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result				
F001	20:08	P.pip	1	S	F - Foraging	SW	3	58-66			Bats chasing over road and foraging at 3metres Above ground Level. Also P	P.pip				
F002	20:10	P.pyg	1	S	F - Foraging	NE	3	80-82			60 kHz Foraging over road at 3 metres AGL	P.pyg				
	20:11		1	NS	F - Foraging			92				P.pip				
	20:11		1	NS	F - Foraging			93-113				P.pyg				
F003	20:13	P.pyg	1	S	S - Socialising	SW	2	117-129			Two Bats chasing over road and foraging at 2 metres Above ground Level	P.pyg				
	20:15		1	NS	C - Commuting			131			Added.	P.aur				
	20:16		1	NS	C - Commuting			142			Added.	P.pyg				
	20:20		1	NS	C - Commuting			187			Added.	P.pyg				
F004	20:21	P.pip	1	NS	C - Commuting	Unk	N/A	192				P.pip				
	20:22		1	NS	F - Foraging			203-216			Added.	P.pyg				
F005	20:24	P.pyg	1	NS	F - Foraging	Unk	N/A	217-227		9	Foraging constant for 3 mins	P.pyg				
	20:27		1	NS	S - Socialising			233-234			Added.	P.pyg				
	20:36		1	NS	C - Commuting			350			Added.	P.pip				
F006	20:39	E.ser	1	NS	F - Foraging	Unk	N/A	366-377			Part of feeding loop.					

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result
	20:39		1	NS	C - Commuting			377			Added.	P.pip
F007	20:41	P.pyg	2	NS	F - Foraging	Unk	N/A	395-402			P.pip also.	P.pyg
F008	20:44	P.pyg	1	NS	F - Foraging	Unk	N/A	422-423		8	Feeding buzz	P.pyg
			1	NS	C - Commuting			505-508			Added.	P.pip
	21:17		1	NS	C - Commuting			672			Added.	P.aur
F009	21:24	Unknown	1	NS	Unknown	Unk	N/A	689			Added.	E.ser
F010	21:30	P.pyg	1	NS	C - Commuting	Unk	N/A	741				P.pyg
F011	21:32	P.pip	1	NS	Unknown	Unk	N/A	751		4		P.pip
F012	21:38	Unknown	1	NS	Unknown	Unk	N/A	783		4	37kHz peak frequency	P.pip
	21:49		1	NS	Unknown			860			Added.	E.ser
	21:50		1	NS	Unknown			863-864			Added.	N.sp.
F013	22:07	P.pip	1	NS	Unknown	Unk	N/A	959			Brief	P.pip
F014	22:19	P.pyg	1	S	F - Foraging	N	3	1009-1011			Foraging along hedgerow at 3m AGL	P.pyg
F015	22:26		1	NS	C - Commuting			1073			Added	B.bar
F016	22:43		1	NS	C - Commuting			1291-1292			Added. Faint call	P.aur
											Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference		Transect 4			Surveyor(s)		JPS and JS		Survey type	BA1: Bat - Activity (transect)	Date	10/10/2017		
Survey Start (24 hours)	18:30	Survey End (24 hours)	21:30	Sunset	18:30	Sunrise		Detector / recording device type and number		Elekon batlogger						
Transect ID	F012	Transect start Eastings (X)		Transect start Northings (Y)				Transect end Eastings (X)			Transect end Northings (Y)					
WEATHER CONDITIONS																
Air Temperature (°C)	17	Wind	2	Cloud Cover	8	Rain	0	Weather Conditions (Description)		Mild and overcast						
OBSERVATIONS																
Point Counts	1	Start: 18:39 Finish: 18:42	2	Start: 18:46 Finish: 18:49	3	Start: 18:56 Finish: 18:59	4	Start: 19:22 Finish: 19:25	5	Start: 19:49 Finish: 19:52	6	Start: 19:43 Finish: 19:46	7	Start: 20:18 Finish: 20:21	8	Start: 20:37 Finish: 20:40
	9	Start: 20:57 Finish: 21:00	10	Start: 21:07 Finish: 21:10												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result				
F001	18:57	P.pip	1	S	F - Foraging	S	2	162		3	Stops 5 and 6 visited in reverse in order to avoid scout camp meeting. Stop 8 moved to bottom of field to avoid tempermental horse. Seen at stop 3 for 2 mins, circling field foraging					
F002	18:58	P.pyg	1	NS	Unknown	N/A	N/A	173		3	Briefly heard at stop 3 at 45 kHz					
F003	19:05	P.pyg	1	S	F - Foraging	W	2	206		2 to 3	Seen just after stop 3 foraging in same field as F001					
F004	19:06	N.sp/E.ser	1	S	C - Commuting	SE	10 to 12	208		2 to 3	Seen flying over field containing stop 3. Approx 12m high commuting in straight line heading SE					
F005	19:08	P.pip	1	NS	F - Foraging	N/A	N/A	215		2 to 3	Heard only at 45 kHz, recurring for 2mins					
F006	19:46	N.sp/E.ser	1	NS	Unknown	N/A	N/A	422		6	Heard at stop 6, 21 to 25 kHz					
F007	19:53	N.sp/E.ser	1	NS	Unknown	N/A	N/A	464		5	Heard at stop 5. 20 to 28 kHz					
F008	19:57	E.ser	1	NS	Unknown	N/A	N/A	516		6 to 2	Heard only 6 - 2, 27 - 36 kHz					
F009	20:18	P.pip	1	NS	Unknown	N/A	N/A	703		7 to 8	Heard only at 45 kHz					
F010	20:34	P.pip	1	NS	Unknown	N/A	N/A	848		7 to 8	Heard only whilst being chased by a horse at 45 kHz					
											Are further surveys needed?					

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference		A358 - BAT TRANSECT 5		Surveyor(s)		CW & AM		Survey type		Date
										BA1: Bat - Activity (transect)		03/04/2017
Survey Start (24 hours)		Survey End (24 hours)		Sunset		Sunrise		Detector / recording device type		BatLogger SOUTS Office		
19:47		22:12		19:48								
Transect ID	Transect start Eastings (X)	Land Parcel Reference	Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
F005	331291	331291	118142		331291		118142					
WEATHER CONDITIONS												
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)				
11		0		7		0		Cloudy, No Breeze, Cool				
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result
F001	19:58									STOP 1 - Nothing		
F002	20:08									STOP 2 - Nothing		Amended
F003	20:16	P.pip	1	NS	C - Commuting			30		found on analysis		Amended
F004	20:17	P.pip	1	NS	C - Commuting			31		added in track no.		Amended
F005	20:21	P.pip	1	S	F - Foraging	S	6m	37		Map ref: black 1 - 8 Passes - added in track no.		Amended
F006	20:21	P.pip	1	NS	F - Foraging			38		found on analysis		Amended
F007	20:21	P.pip	1	NS	C - Commuting			39		found on analysis		Amended
F008	20:21	P.pip	1	NS	C - Commuting			40		found on analysis		Amended
F009	20:21	P.pip	1	NS	C - Commuting			41		found on analysis		Amended
F010	20:21	P.pip	1	NS	C - Commuting			42		found on analysis		Amended
F011	20:21	P.pip	1	NS	C - Commuting			43		found on analysis		Amended
F012	20:22	P.pip	1	NS	C - Commuting			44		found on analysis		Amended
F013	20:22	P.pip	1	NS	C - Commuting			45		found on analysis		Amended
F014	20:22	P.pip	1	NS	C - Commuting			47		found on analysis		Amended
F015	20:22	P.pip	1	NS	C - Commuting			48		found on analysis		Amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	20:22	P.pip	1	NS	C - Commuting			49		found on analysis	Amended
F017	20:23	P.pip	1	NS	F - Foraging			50		found on analysis	Amended
F018	20:23	P.pip	1	NS	F - Foraging			51		found on analysis	Amended
F019	20:23	P.pip	1	NS	F - Foraging			52		found on analysis	Amended
F020	20:23	P.pip	1	NS	F - Foraging			53		found on analysis	Amended
F021	20:23	P.pip	1	NS	F - Foraging			54		found on analysis	Amended
F022	20:24	P.pip	1	S	F - Foraging	W	6m	58		Map ref: black 2 - Along Venners Water - Feeding - added in track no.	Amended
F023	20:25									STOP 3 - Nothing	
F024	20:32	P.pip	1	S	F - Foraging	W	5m	71		5 Passes along Venners Water, Feeding -added in track no.	Amended
F025	20:32	P.pip	1	NS	F - Foraging			72		found on analysis	Amended
F026	20:32	P.pip	1	NS	F - Foraging			73		found on analysis	Amended
F027	20:32	P.pip	1	NS	F - Foraging			74		found on analysis	Amended
F028	20:33	P.pip	1	NS	F - Foraging			76		found on analysis	Amended
F029	20:33	P.pip	1	NS	F - Foraging			78		found on analysis	Amended
F030	20:34	P.pip	1	NS	F - Foraging			82		found on analysis	Amended
F031										STOP 4 - Nothing	Amended
F032	20:37	P.pip	1	S	F - Foraging	S	5m	84		Map ref: black 3 - Feeding above our heads along the hedgerows - added in track no. and changed time	Amended
F033	20:37	P.pip	1	NS	F - Foraging			85		found on analysis	Amended
F034	20:39	P.pip	1	NS	F - Foraging			89		found on analysis	Amended
F035	20:39	P.pip	1	NS	F - Foraging			90		As above, Map ref: black 3 - Feeding above our heads along the hedgerows - added in track no.	Amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F036	20:39	P.pip	1	NS	F - Foraging			89		found on analysis	Amended
F037	20:39	P.pip	1	NS	F - Foraging			91		found on analysis	Amended
F038	20:39	P.pip	1	NS	F - Foraging			92		found on analysis	Amended
F039	20:40	P.pip	1	NS	F - Foraging			93		found on analysis	Amended
F040	20:40	P.pip	1	NS	F - Foraging			94		found on analysis	Amended
F041	20:40	P.pip	1	NS	F - Foraging			96		found on analysis	Amended
F042	20:43									STOP 5 - Nothing	
F043	20:46	P.pyg	1	NS	C - Commuting			106		near pond - added in track no.	Amended
F044	20:50	P.pip	2	NS	F - Foraging			108		Map ref: black 4 - Foraging in hedgeline between fields - added in track no.	Amended
F045	20:50	P.pip	1	NS	F - Foraging			110		found on analysis	Amended
F046	20:50	P.pip	1	NS	F - Foraging			111		found on analysis	Amended
F047	20:50	P.pip	1	NS	F - Foraging			112		found on analysis	Amended
F048	20:50	P.pip	1	NS	F - Foraging			113		found on analysis	Amended
F049	20:51	P.pip	1	NS	F - Foraging			114		found on analysis	Amended
F050	20:51	P.pip	1	NS	F - Foraging			115		found on analysis	Amended
F051	20:51	P.pip	1	NS	F - Foraging			116		found on analysis	Amended
F052	20:51	P.pip	1	NS	F - Foraging			117		found on analysis	Amended
F053	20:51	P.pip	1	NS	F - Foraging			118		found on analysis	Amended
F054	20:52	P.pip	1	NS	F - Foraging			119		found on analysis	Amended
F055	21:04	P.pip	1	NS	c - Commuting			132		found on analysis	Amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F056	21:04	N.noc	1	NS	c - Commuting			133		found on analysis	Amended
F057	21:04	N.noc	1	NS	c - Commuting			134		found on analysis	Amended
F058	21:06	P.pip	1	NS	F - Foraging			136		Foraging along hedge - added in track no.	Amended
F059	21:06	P.pip	1	NS	c - Commuting			137		found on analysis	Amended
F060	21:06	P.pip	1	NS	c - Commuting			138		found on analysis	Amended
F061	21:09	P.pip	1	NS	c - Commuting			143		found on analysis	Amended
F062	21:12									STOP 6- Nothing	
F063	21:17	P.pip	1	NS	C - Commuting			152		no notes - added in track no.	
F064	21:20	P.pip	1	NS	C - Commuting			156		Map ref: black 5 - along lane to house - changed time and added track no.	Amended
F065	21:20	P.pip	1	NS	F - Foraging			157		along lane to house close to F017 - added in track no.	Amended
F066	21:20	P.pip	1	NS	c - Commuting			158		found on analysis	Amended
F067	21:20	P.pip	1	NS	c - Commuting			159		found on analysis	Amended
F068	21:21	P.pip	1	NS	c - Commuting			162		found on analysis	Amended
F069	21:21	P.pip	1	NS	c - Commuting			164		found on analysis	Amended
F070	21:21	P.pip	1	NS	c - Commuting			165		found on analysis	Amended
F071	21:23	P.pip	1	NS	c - Commuting			170		found on analysis	Amended
F072	21:27	P.pip	1	NS	c - Commuting			181		found on analysis	Amended
F073	21:30									STOP 7 - Nothing	
F074	21:31	P.pip	1	NS	c - Commuting			186		found on analysis	Amended
F075	21:48									STOP 8 - Nothing	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F076	21:49									STOP 9 - Nothing	
F077	21:56									STOP 10 - Nothing - Slight Drizzle	
F078	21:58	P.Pip	1	NS	C - Commuting			206		Map ref: (between STOP 10 and Final Track) - added in track no.	Amended
F079	21:59	P.Pip	1	NS	C - Commuting			207		found on analysis	Amended
F080	22:01	P.Pip	1	NS	C - Commuting			209		found on analysis	Amended
F081	22:10	P.Pip	1	NS	C - Commuting			221		Along final track - added in track no.	Amended
F082	22:10	P.Pip	1	NS	C - Commuting			222		found on analysis	Amended
F083	22:11	P.Pip	1	NS	C - Commuting			225		found on analysis	Amended
F084	22:12	END									
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY											
Ecology ID		Land Parcel Reference		A358 - BAT TRANSECT 5		Surveyor(s)		AM & LN		Survey type	
										BA1: Bat - Activity (transect)	
Survey Start (24 hours)		Survey End (24 hours)		Sunset		Sunrise		Detector / recording device type		Date	
20:35		22:45		20:55				Batlogger Sotton D5		15/05/2017	
Transect ID		Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)			
F005		331291		118142		331291		118142			
WEATHER CONDITIONS											
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)			
15		1		9		1		Cloudy Humid Mild - very slight drizzle - Go Ahead obtained from Simon.			
OBSERVATIONS											
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F001	20:48									Waypoint 1	
F002	20:57									Waypoint 2 - (Waypoint 3 missed due to livestock)	
F003	21:12	P.pip	1	NS	C			132		Waypoint 4	confirmed
F004	21:14	P.pip	1	NS	C			135		found on analysis	amended
F005	21:14	P.pip	1	NS	C			136		found on analysis	amended
F006	21:18	P.pip	1	NS	C			150			confirmed
F007	21:23									Waypoint 5	
F008	21:26	P.pip	1	NS	F			173		found on analysis	amended
F009	21:26	P.pip	1	NS	F			174		found on analysis	amended
F010	21:26	P.pip	1	NS	F			175		found on analysis	amended
F011	21:27	P.pip	1	S	F	circular	2m	176		feeding near pond.	confirmed
F012	21:27	P.pip	1	NS	F			177		found on analysis	amended
F013	21:27	P.pip	1	NS	F			178		found on analysis	amended
F014	21:27	P.pip	1	NS	F			179		found on analysis	amended
F015	21:27	P.pip	1	NS	F			180		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	21:27	P.pip	1	NS	F			181		found on analysis	amended
F017	21:27	P.pip	1	NS	F			183		found on analysis	amended
F018	21:31	P.pip	2	S	F	circular	2m	190		feeding on hedgerow	confirmed
F019	21:31	P.pip	1	NS	F			191		found on analysis	amended
F020	21:31	P.pip	1	NS	F			192		found on analysis	amended
F021	21:31	P.pip	1	NS	F			193		found on analysis	amended
F022	21:31	P.pip	1	NS	F			194		found on analysis	amended
F023	21:32	P.pip	1	NS	F			195		found on analysis	amended
F024	21:32	P.pip	1	NS	F			196		found on analysis	amended
F025	21:32	P.pip	1	NS	F			197		found on analysis	amended
F026	21:32	P.pip	1	NS	F			198		found on analysis	amended
F027	21:32	P.pip	1	NS	F			199		found on analysis	amended
F028	21:32	P.pip	1	NS	F			200		found on analysis	amended
F029	21:32	P.pip	1	NS	F			201		found on analysis	amended
F030	21:33	P.pip	3 or more	S (1)	F	circular	3m	202		feeding on hedgerow	confirmed
F031	21:33	P.pip	1	NS	F			203		found on analysis	amended
F032	21:33	P.pip	1	NS	F			205		found on analysis	amended
F033	21:33	P.pip	1	NS	F			206		found on analysis	amended
F034	21:33	P.pip	1	NS	F			208		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F035	21:33	P.pip	1	NS	C			209		found on analysis	amended
F036	21:34	P.pip	1	NS	F			210		found on analysis	amended
F037	21:34	P.pip	1	NS	F			212		found on analysis	amended
F038	21:34	P.pip	1	NS	F			214		found on analysis	amended
F039	21:34	P.pip	1	NS	F			215		found on analysis	amended
F040	21:34	P.pip	1	NS	F			216		found on analysis	amended
F041	21:34	P.pip	1	NS	F			218		found on analysis	amended
F042	21:35	P.pip	2	S	F	circular	3m	219		feeding on hedgerow	confirmed
F043	21:35	P.pip	1	NS	F			220		found on analysis	amended
F044	21:35	P.pyg	1	NS	F			221		found on analysis	amended
F045	21:35	P.pyg	1	NS	F			223		found on analysis	amended
F046	21:35	P.pip	1	NS	F			224		found on analysis	amended
F047	21:35	P.pip	1	NS	F			225		found on analysis	amended
F048	21:35	P.pyg	2	NS	F			226		found on analysis	amended
F049	21:36	P.pyg	2	NS	F			227		found on analysis	amended
F050	21:36	P.pip	1	NS	F			228		found on analysis	amended
F051	21:36	P.pyg	2	NS	F			229		found on analysis	amended
F052	21:36	P.pyg	1	NS	F			230		found on analysis	amended
F053	21:36	P.pip	1	NS	F			231		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F054	21:36	P.pyg	2	NS	F			232		found on analysis - I think there is a pip	amended
F055	21:36	P.pip	1	NS	F			233		found on analysis	amended
F056	21:37	P.pip	2	S	C	S	3m	234			confirmed
F057	21:37	P.pip	1	NS	F			235		found on analysis	amended
F058	21:37	P.pip	1	NS	F			236		found on analysis	amended
F059	21:37	P.pip	1	NS	F			238		found on analysis	amended
F060	21:38	P.pip	1	NS	F			241		found on analysis	amended
F061	21:39	P.pip	1	NS	C			244			confirmed
F062	21:39	P.pip	1	NS	F			245		found on analysis	amended
F063	21:39	P.pip	1	NS	F			246		found on analysis	amended
F064	21:40	P.pip	1	NS	C			247		found on analysis	amended
F065	21:40	P.pip	1	NS	F			248		found on analysis	amended
F066	21:41	P.pip	1	NS	F			252		found on analysis	amended
F067	21:41	P.pip	1	NS	C			253			confirmed
F068	21:43	Noctule ? 25mhz	1	NS	C					Waypoint 6 - no bats around that time	NR
F069	21:46	N.noc	1	NS	C			269		found on analysis	amended
F070	21:54	P.pip	1	NS	f			289		found on analysis	amended
F071	21:54	P.pip	1	NS	f			290		found on analysis	amended
F072	21:55	P.pip	1	NS				291		Past the house and more than halfway down the lane.	confirmed

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F073	21:56	P.pip	1	NS	f			294		found on analysis	amended
F074	21:56	P.pip	1	NS	f			295		found on analysis	amended
F075	22:01	P.aur	1	NS	f			307		found on analysis	amended
F076	22:01	P.aur	1	NS	f			308		found on analysis	amended
F077	22:02									Waypoint 7	
F078	22:09	P.pip	1	NS	C			318			confirmed
F079	22:11	P.pip	1	NS	c			320		found on analysis	amended
F080	22:13	P.pip	1	NS				325		over low hedge/line	confirmed
F081	22:13	P.pip	1	NS	c			326		found on analysis	amended
F082	22:13	P.pip	1	NS	S			327		found on analysis	amended
F083	22:14	P.pip	1	NS	f			328		found on analysis	amended
F084	22:14	P.pip	1	NS	f			329		found on analysis	amended
F085	22:17									Waypoint 8	
F086	22:21									Waypoint 9	
F087	22:22	M.sp	1	NS	C			342		found on analysis	amended
F088	22:23	M.sp	1	NS	f			346		At Waypoint 9	confirmed
F089	22:23	M.sp	1	NS	f			347		found on analysis	amended
F090	22:23	M.sp	1	NS	f			348		found on analysis	amended
F091	22:23	M.sp	1	NS	f			349		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F092	22:29									Waypoint 10	
F093	22:30	E.ser	1	NS	C			364		At Waypoint 10	confirmed
F094	22:30	E.ser	1	NS	c			365		found on analysis	amended
F095	22:33	P.pip	1	NS	C			371		At Waypoint 10	confirmed
F096	22:33	P.pip	1	NS	C			372		found on analysis	amended
F097	22:44	P.pip	1	NS	C			424		found on analysis	amended
F098	22:45	M.sp	1	NS	C			429		found on analysis	amended
F099	22:45									END OF SURVEY	
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	A358 - BAT TRANSECT 5- Reverse			Surveyor(s)		AM & JD		Survey type	BA1: Bat - Activity (transect)	Date	12/06/2017
Survey Start (24 hours)	21:24	Survey End (24 hours)	00:26	Sunset	21:26	Sunrise		Detector / recording device type	Anabat Walkabout 5				
Transect ID	5	Transect start Eastings (X)	324834	Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
WEATHER CONDITIONS													
Air Temperature (°C)	14	Wind	1	Cloud Cover	80%	Rain	0	Weather Conditions (Description)	Cloudy, Mild				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:17									Waypoint 6			
F002	21:43									Waypoint 7			
F003	21:55									Waypoint 8			
F004	22:03									Waypoint 9			
F005	22:13									Waypoint 10			
F006	22:17	Serotine	1	S	C	E	4m			Waypoint 10			
F007	22:20	Serotine	1	S	F	W	2.5m						
F008	22:30	P45	1	NS	F	W	2.5m			foraging continuous			
F009	22:35	Serotine	1	NS	C								
F010	22:39	P45	1	NS	F								
F011	22:42	Long eared bat	1	S	F	S	5m						
F012	22:44									Way Point 6			
F013	22:48	Myotis sp	1	NS	C								
F014	22:54	Myotis sp	1	NS	C								
F015	23:05									Way Point 1			

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference	T5			Surveyor(s)	JD MK		BA1: Bat - Activity (transect)		Date	12/06/2017
Survey Start (24 hours)	02:16	Survey End (24 hours)	05:16	Sunset	21:26	Sunrise	05:16	Detector / recording device type	Anabat Walkabout 5			
Transect ID	5	Transect start Eastings (X)	324834	Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)	14	Wind	1	Cloud Cover	80%	Rain	0	Weather Conditions (Description)	Cloudy, Mild			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F	02:16:00	Common pipistrelle	1	S	Foraging					seen circling around street lighting over road at 10m above ground level	Not Recorded	
F2	02:16:00	Noctule	1	NS	Commuting						Not Recorded	
F3	02:27:00	Common pipistrelle	1	NS	Foraging					3 passes	Confirmed	
F4	02:45:00	Common pipistrelle	1	NS	Foraging					feeding buzz multiple passes	Confirmed	
	02:46:00	Myotis sp.	1	NS	Commuting						Found in Analysis	
F5	02:52:00	Common pipistrelle	1	NS	Foraging					feeding buzz multiple passes point 9	Confirmed	
	02:58:00	Common pipistrelle	1	NS	Commuting						Found in Analysis	
F6	03:18:00	Common pipistrelle	1	NS	Foraging					multiple passes	Confirmed	
F7	03:24:00	Soprano pipistrelle	1	NS	Foraging					multiple passes	Confirmed	
F8	03:30:00	Myotis sp.	1	NS	Commuting					point 6, changed from noctule to myotis sp during sound analysis	Amended	
F9	03:35:00	Common pipistrelle	1	NS	Foraging					multiple passes	Confirmed	
F10	03:39:00	Long-eared bat	1	S	Commuting					flying east along track 2m above ground level 3 passes, changed from common pipistrelle to long eared bat du	Amended	
	03:41:00	Common pipistrelle	1	NS	Commuting						Found in Analysis	
F11	03:43:00	Common pipistrelle	1	S	Commuting					4pass seen along treeline at 7m above ground level west	Confirmed	
F12	03:48:00	Common pipistrelle	2	S	Commuting					2pass 1 bat seen along treeline at 3m above ground level west, 1 bat not seen	Confirmed	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F13	03:53:00	Common pipistrelle	1	NS	Commuting						Confirmed	
F14	03:56:00	Common pipistrelle	1	S	Foraging					2pass seen along treeline at 3m above ground level circling point 4	Confirmed	
	04:00:00	Common pipistrelle	1	NS	Commuting						Found in Analysis	
F15	04:15:00	Common pipistrelle	1	S	Commuting					1 pass flying next to scrub at 4m above ground level over pasture to the east.		Confirmed
F16	04:23:00	Myotis sp.	1	NS	Commuting					changed from common pipistrelle to myotis sp during sound analysis		Amended
	04:39:00	Common pipistrelle	1	NS	Commuting						Found in Analysis	
F17	04:48:00	Common pipistrelle	1	NS	Commuting						Amended	
										Are further surveys needed?		

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference	T5			Surveyor(s)	JD MK		BA1: Bat - Activity (transect)		Date	15/07/2020
Survey Start (24 hours)	21:19	Survey End (24 hours)	23:19	Sunset	21:19	Sunrise		Detector / recording device type	Anabat Walkabout 6			
Transect ID	5	Transect start Eastings (X)	324834	Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)		
WEATHER CONDITIONS												
Air Temperature (°C)	16	Wind	1	Cloud Cover	40%	Rain	0	Weather Conditions (Description)	overcast humid, dry, moderate number of flying insects, 22:14 near miss safe to continue, must avoid fields with cattle see map. Transect route edited.			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F1	21:30:00	Common pipistrelle	1	1 S	Commuting					seen flying north east over hedgerow and track 4m above ground	Confirmed	
F2	21:33:00	Common pipistrelle	1	1 NS	Commuting					1 pass	Confirmed	
F3	21:39:00	Noctule	1	1 S	Commuting					seen circling over pasture at 50m above ground then flew north	Confirmed	
F4	21:45:00	Noctule	1	1 NS	Commuting					point 1 - 1 pass	Confirmed	
	21:52:00	Noctule	1	1 NS	Commuting						Found in Analysis	
F5	21:59:00	Serotine	1	1 NS	Commuting					point 2- 1 pass	Confirmed	
F6	21:45:00	Noctule	1	1 NS	Commuting					point 2 - 1 pass	Confirmed	
F7	22:04:00	Common pipistrelle	1	1 S	Commuting					point 3 commuting p.pip south west	Confirmed	
F8	22:19:00	Common pipistrelle	1	1 NS	Commuting						Confirmed	
F9	22:24:00	Serotine	1	1 NS	Commuting					1 pass not seen	Confirmed	
F10	22:30:00	Common pipistrelle		S	Commuting					point 4 seen flying along track west at 4m above ground	Confirmed	
F11	22:32:00	Nyctalus sp.	1	1 NS	Commuting					point 4 point	Not Recorded	
F12	22:32:00	Common pipistrelle	1	1 NS	Foraging					point 4 point	Confirmed	
F13	22:34:00	Common pipistrelle	1	1 S	Foraging					multiple passes feeding buzz over pasture 3m high east direction	Confirmed	
F14	22:39:00	Noctule	1	1 NS	Commuting						Not Recorded	

BA1, BA3, BA4 - Bat activity survey proforma

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)		Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F15	22:39:00	Common pipistrelle	1	1	S	Foraging				seen 15m above pasture flying east	Confirmed	
	22:43:00	Myotis sp.	1	1	S	Commuting					Found in Analysis	
F16	22:45:00	Common pipistrelle	1	1	S	Foraging				seen 5m above pasture next to treeline flying east and west	Confirmed	
F17	22:50:00	Myotis sp.	1	1	S	Commuting				point 5 one pass not seen	Confirmed	
F18	23:02:00	Common pipistrelle	1	1	NS	Commuting					Confirmed	
F19	23:04:00	Noctule	1	1	NS	Foraging				recorded for 2 mins	Confirmed	
F20	23:04:00	Common pipistrelle	2	2	S	Foraging				circling over road 5m above road under street light's. soprano pipistrelle recorded as well for 9 mins	Amended	
	23:14:00	Common pipistrelle	1	1	S	Foraging					Found in Analysis	
F21	23:16:00	Common pipistrelle	1	1	NS	Foraging					Confirmed	
F24	23:49:00	Common pipistrelle	1	1	NS	Commuting					Confirmed	
F25	23:55:00	Noctule	1	1	NS	Commuting				point 9	Confirmed	
F26	00:00:00	Common pipistrelle	1	1	S	Commuting				seen flying 15m above ground level east along tree line	Confirmed	
	00:01:00	Myotis sp.	1	1	S	Commuting					Found in Analysis	
F27	00:03:00	Common pipistrelle	1	1	NS	Commuting				point 10	Confirmed	

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID		Land Parcel Reference		T5			Surveyor(s)		DL TW		BA1: Bat - Activity (transect)		Date	05/08/2020	
Survey Start (24 hours)		20:50		Survey End (24 hours)		23:40		Sunset	20:50		Sunrise	Detector / recording device type		Anabat Walkabout 3	
Transect ID	5	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)					
WEATHER CONDITIONS															
Air Temperature (°C)		17		Wind		2		Cloud Cover	70%		Rain	0		Weather Conditions (Description)	occasionally gusting F4
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Point count number	Track no.	Track time	Notes			Sound analysis result			
F1	21:13:00	Soprano pipistrelle	1	S	Commuting				north along hedge			Confirmed			
F2	21:18:00	Noctule	1	S					high NW			Confirmed			
F3	21:20:00	Common pipistrelle	1	NS					southern edge			Confirmed			
F4	21:24:00	Common pipistrelle	1	NS	Foraging				Foraging on otherside of Venner's Water W-E			Confirmed			
F5	21:31:00	Soprano pipistrelle	1	NS		3			corner of field			Confirmed			
F6	21:34:00	Common pipistrelle	1	S	Foraging	3			in corner, over stream			Confirmed			
F7	21:38:00	Myotis sp.	1	NS					Very faint			Found in Analysis			
F8	21:40:00	Serotine	1	NS								Found in Analysis			
F9	21:40:00	Myotis sp.	1	S					Flying north along hedge			Confirmed			
F10	21:42:00	Common pipistrelle							Northeast corner of field			Confirmed			
F11	21:43:00	Serotine							Northeast corner of field			Confirmed			
F12	21:45:00	Common pipistrelle				4						Confirmed			
F13	21:48:00	Long-eared bat				4						Amended			
F14	21:48:00	Common pipistrelle				4						Confirmed			
F15	21:53:00	Myotis sp.	1	NS					path			Amended			

BA1, BA3, BA4 - Bat activity survey proforma

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Point count number	Track no.	Track time	Notes	Sound analysis result
F16	21:56:00	Common pipistrelle	1	NS					path	Confirmed
F17	21:56:00	Noctule	1	NS						Confirmed
F18	21:58:00	Myotis sp.	1	NS					field entrance by road	Confirmed
F19	22:06:00	Noctule	1	NS		5				Confirmed
F20	22:11:00	Common pipistrelle	1	NS						Found in Analysis
F21	22:15:00	Common pipistrelle	1	NS		6				Confirmed
F22	22:26:00	Serotine	1	NS						Found in Analysis
F23	22:29:00	Noctule								Confirmed
F24	22:29:00	Myotis sp.								Confirmed
F28	23:21:00	Myotis sp.							Faint	Found in Analysis
F29	23:22:00	Common pipistrelle								Confirmed
F30	23:39:00	Common pipistrelle							By road	Confirmed

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID	Transect 5		Land Parcel Reference	BAT TRANSECT 5			Surveyor(s)	AM & MA		Survey type	BA1: Bat - Activity (transect)		Date	11/09/2017		
Survey Start (24 hours)	19:30		Survey End (24 hours)	22:36		Sunset	19:36		Sunrise	Detector / recording device type		Anabat walkabout				
Transect ID	F005		Transect start Eastings (X)	Transect start Northings (Y)			Transect end Eastings (X)		Transect end Northings (Y)							
WEATHER CONDITIONS																
Air Temperature (°C)	14		Wind	2		Cloud Cover	3		Rain	0		Weather Conditions (Description)	Cool and breezy			
OBSERVATIONS																
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result					
F001	19:30								16:50	Detector: <u>Anabat Walkabout AW2</u> - (KG analysis - all track times about 1hr40 mins off - amended times in track time column, originals remain in B column) Reverse order transect but East side of Stewley Lane done before West Side in order to walk through cow fields with less darkness.						
F002	19:45								17:05	Waypoint 5						
F003	19:59								17:19	Waypoint 4						
F004	20:00	P.pip	1	S	F - Foraging	N/A	3.5		17:20-17:24	near-constant feeding for 3-5 mins at Waypoint 4 (2 pips seen on recordings)	Amended					
		P.pyg	1	NS					17:27	added from analysis	Amended					
F005	20:08								17:28	Waypoint 3						
		P.pip	1	NS	C - Commuting				17:28-17:29	added from analysis	Amended					
F006	20:11	P.pip	1	NS	C - Commuting				17:31-17:33	at Waypoint 3	Confirmed					
		P.pyg	1	NS					17:32	added from analysis	Amended					
F007	20:12	M.sp.	1	NS	C - Commuting				17:32	at Waypoint 3 (no myotis at this time)	Amended					
F008	20:17	M.sp.	1	S	C - Commuting	NW	3		17:37	Arriving at Waypoint 2 . (amended from possible Brown Long Eared)	Amended					
		M.sp.	1	NS					17:39	added from analysis	Amended					
F009	20:20	E.ser	1	S	C - Commuting	N	4		17:39 and 17:41	at Waypoint 2 - possibly leislars?	Confirmed					
F010	20:21	M.sp.	1	NS	C - Commuting				17:40-17:43	at Waypoint 2	Confirmed					
		Pip sp.	1	NS					17:42	added from analysis	Amended					

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
		P.pyg	1	NS					17:42	added from analysis	Amended
		E.ser	1	NS					17:43-17:45	added from analysis	Amended
		M.sp.	1	NS					17:44	added from analysis	Amended
		N.sp/E.ser	1	NS					17:45-17:46	added from analysis	Amended
		M.sp.	1	NS					17:47	added from analysis	Amended
		M.sp.	1	NS					17:50	added from analysis	Amended
		P.pip	1	NS					17:53	added from analysis	Amended
F011	20:34								17:54	Waypoint 1	
F012	20:37	P.pip	1	NS	C - Commuting				17:56	at Waypoint 1	Confirmed
		P.pip	1	NS					18:03	added from analysis	Amended
F013	20:46	B.bar	1	S	C - Commuting	S			18:05	near Waypoint 6 : (...20:47 - Waypoint 6 again then West side of Stewley Lane) (amended from unknown species)	Amended
		P.pip	1	NS					18:08	added from analysis	Amended
		P.pip	1	NS					18:10-18:12	added from analysis	Amended
F012	21:01	M.sp.	1	S	C - Commuting	N			18:19-18:20	amended from unknown 18:21 - probably same bat?	Amended
		P.pip	1	NS					18:20	added from analysis	Amended
F013	21:04								18:24	Waypoint 7	
		P.pip	1	NS					18:27	added from analysis	Amended
		N.sp/E.ser	1	NS					18:38	added from analysis	Amended
F016	21:19								18:39	Waypoint 8	
F017	21:31								18:51	Waypoint 9	

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID	Transect 5		Land Parcel Reference	BAT TRANSECT 5			Surveyor(s)	RW JC		Survey type	BA1: Bat - Activity (transect)	Date	09/10/2017
Survey Start (24 hours)	18:34		Survey End (24 hours)	21:34		Sunset	18:34		Sunrise	Detector / recording device type			Anabat walkabout
Transect ID	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)				
WEATHER CONDITIONS													
Air Temperature (°C)	16		Wind	1		Cloud Cover	4		Rain	0		Weather Conditions (Description)	warm and still
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	18:54									Waypoint 1 Transect altered due to cattle and electric fencing blocking route. Alternate route marked on map. Waypoints 3,4 and 5 missed out.			
	18:58	Pip sp.	1	NS						added on analysis	Amended		
F002	19:02	P.pyg		NS						Waypoint 2 (amended from 19:01)	Amended		
F003	19:06	P.pip		NS						(amended from 19:07)	Amended		
F004	19:11-19:15	P.pip	1	S			5			amended from 19:11-19:17	Amended		
	19:19	M.sp.	1	NS						added on analysis	Amended		
F005	19:33									Waypoint 6			
	19:36	M.sp.	1	NS						added on analysis	Amended		
F006	19:38-19:39	E.ser	1	NS	C - Commuting					amended from 19:38	Amended		
F007	19:51-19:52	P.pyg	1	NS						Waypoint 7 (amended from 19:51)	Amended		
F008	19:53-19:57	P.pip	1		F - Foraging					Waypoint 7 (amended from 19:53)	Amended		
	19:57	E.ser	1	NS						added on analysis	Amended		
F009	20:01	P.pip	1	NS						Two passes (amended from 20:02 pip sp)	Amended		
	20:03	Unknown	1	NS						added on analysis - possibly BLE??	Amended		
	20:07	Pip sp.	1	NS						added on analysis	Amended		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F010	20:11									Waypoint 8	
	20:22	E.ser	1	NS						added on analysis	Amended
F011	20:25									Waypoint 9	
F012	20:45									Waypoint 10	
F013	20:14-20:15	M.sp.	1	s			5			multiple passes up and down hedgerow (amended from pip)	Amended
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	BAT TRANSECT 6			Surveyor(s)		CW & AM		Survey type	BA1: Bat - Activity (transect)	Date	04/04/2017
Survey Start (24 hours)	19:49	Survey End (24 hours)	22:05	Sunset	19:49	Sunrise		Detector / recording device type	Other				
Transect ID	F006	Transect start Eastings (X)	331547	Transect start Northings (Y)	117796		Transect end Eastings (X)	331547	Transect end Northings (Y)	117796			
WEATHER CONDITIONS													
Air Temperature (°C)	11	Wind	1	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Cool and Cloudy				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	19:56									STOP 1 - No Observations			
F002	20:08	P.pip	2	S	F - Foraging	N/A	4			Map ref: black 1 - Two individuals circling Ash Farm in garden and yard. Foraging. Possible Roost near Ash Farm due to			
F003	20:14	P.pip	2	S	F - Foraging	E	4			Map ref: black 2 - Commuting along scrub line at bottom of field.			
F004	20:14									STOP 2 - NO OBSERVATIONS			
F005	20:16	P.pip	1	NS	C - Commuting					Not seen. Thought to be in the scrub and woodland - include in STOP 2.			
F006	20:22	P.pip	1	S	C - Commuting	S	5			Map ref: black 3 - Along hedgerow			
F007	20:29									STOP 3 - No Observations			
F008	20:53									STOP 4 - No Observations			
F009	21:01	P.pip	1	NS	C - Commuting					no further info			
F010	21:10	P.pip	2	S	F - Foraging	SW	4			STOP 5 - feeding amongst trees Map ref: Black 4.			
F011	21:13	P.pip	1	NS	F - Foraging					Feeding along hedgeline off road - cant see.			
F012	21:16	P.pyg	1	NS	C - Commuting								
F013	21:19	Unknown	1	S	C - Commuting	W	5			Quick flight past - unsure of species			
F012	21:20									STOP 6 - No Observations			
F013	21:26									STOP 7 - No Observations			
F016	21:31	P.pip	2	NS	F - Foraging					Map ref: Black 5 Feeding along Highways England Track - Sounds like several bats. Lots of activity			

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	BAT TRANSECT 6			Surveyor(s)	AM + LN		Survey type	BA1: Bat - Activity (transect)		Date	16/05/2017
Survey Start (24 hours)	20:56	Survey End (24 hours)	23:01	Sunset	20:56	Sunrise			Detector / recording device type	Other			
Transect ID	F006	Transect start Eastings (X)	331547	Transect start Northings (Y)	117796		Transect end Eastings (X)	331547	Transect end Northings (Y)	117796			
WEATHER CONDITIONS													
Air Temperature (°C)	16	Wind	2	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Overcast, humid and mild				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:04									STOP 1 - No Observations			
F002	21:16	N.noc	1	NS	C - Commuting					Near stop 10	N.noc		
	21:18									Found during analysis	P.pip		
F003	21:19	N.noc	1	S	C - Commuting	S	10			Near stop 10	N.noc		
F004	21:22	N.noc	1	NS	C - Commuting						N.noc		
F005	21:27									STOP 3 - No Observations			
F006	21:34									STOP 2 - No Observations			
F007	21:37	P.pip	1	NS	C - Commuting					STOP 2	P.pip		
F008	21:38	P.pip	1	S	C - Commuting					STOP 2	P.pip		
F009	21:42	P.pip	1	NS	C - Commuting					Stop 4	P.pip		
	21:42									Found during analysis	E.ser		
	21:44									Found during analysis. Faint	P.pip		
F010	21:47	E.ser	1	NS	C - Commuting					STOP 5	N.noc		
F011	21:48	P.pip	1	NS	C - Commuting					STOP 5	P.pip		
F012	21:50	P.pip	1	NS	C - Commuting					STOP 5	P.pip		
F013	21:54									STOP 5			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F012	22:05	P.pip	1	NS	C - Commuting					STOP 5	P.pip
F013	22:06									STOP 5	
F016	22:07	E.ser	1	NS	C - Commuting					Stop 5	E.ser
F017	22:10	P.pip	1	NS	F - Foraging					Near Oak trees on the road	P.pip
	22:10									Found during analysis	P.aur
F018	22:13	E.ser	1	NS	C - Commuting						N.noc
F019	22:16	P.pip	1	NS	C - Commuting						P.pip
F020	22:17									Stop 6	
F021	22:19	P.pip	1	NS	C - Commuting					Stop 6	P.pip
F022	22:20	P.pyg		NS	C - Commuting					Arriving at Stop 8	P.pyg
F023	22:21	P.pip	2	NS	F - Foraging					Stop8	P.pip
	22:21									Found during analysis	E.ser
F024	22:23	P.pip	1	NS	C - Commuting					Stop8. Plus P.pyg found during analysis	P.pip
F025	22:24	P.pip	1	NS	C - Commuting					Stop8	P.pip
F026	22:25	P.pip	1	NS	C - Commuting					Stop8	P.pip
F027	22:26	P.pip	1	NS	F - Foraging					Stop8. Plus BLE found during analysis	P.pip
F028	22:29									Stop 7	
F029	22:30	M.sp.	1	NS	C - Commuting					Stop 7	P.aur
F030	22:32	P.pip	1	NS	C - Commuting						P.pip
F031	22:34	P.pip	1	NS	F - Foraging						P.pip

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID	Transect 6		Land Parcel Reference	A358 - BAT TRANSECT 6			Surveyor(s)	AM, JD		Survey type	BA1: Bat - Activity (transect)		Date	13/06/2017
Survey Start (24 hours)	21:15		Survey End (24 hours)	21:27		Sunset	21:27		Sunrise			Detector / recording device type	Batlogger Southampton D3	
Transect ID	7	Transect start Eastings (X)	332128		Transect start Northings (Y)	117409			Transect end Eastings (X)	332128		Transect end Northings (Y)	117409	
WEATHER CONDITIONS														
Air Temperature (°C)	15		Wind	1		Cloud Cover	1		Rain	0		Weather Conditions (Description)	Clear and mild	
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001										REVERSE ORDER ROUTE				
F002	21:20									Waypoint 10				
F003	21:31									Waypoint 9				
F004	21:51	P45	2	NS	C			273, 285		Arriving at Waypoint 6 - (bats heard from 21:51 to 21:53)				
F005	21:54	P45	1	NS	F			300		Close to Waypoint 6				
F006	21:56	P45	1	en (S) / Not Seen (N	F	circling	4m	324		Close to Waypoint 6				
F007	21:56	unknown	1	S	C	S	12m			bat seen flying over roof of Thickhorn House				
F008	21:58	P45	1	NS	F					between Waypoint 6-8				
F009	21:58									Waypoint 8				
F010	21:59	Serotine	1	NS				338		At Waypoint 8				
F011	21:59	P45	2	S	F	circling	3m			At Waypoint 8 - (bats 21:59 - 22:00)				
F012	22:05									Waypoint 7				
F013	22:08	myotis sp.	1	NS						At Waypoint 7				
F014	22:08	P45	1	S	C	W	3m	407?		At Waypoint 7				
F015	22:10	P45	1	S	C	E	3m	423						

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	22:12	P45	1	S	C	S	3m	442			
F017	22:14	Serotine	1	NS	C			474			
F018	22:16	P45	1	S	C	S	3m	497			
F019	22:19	P45	1	S	C	N	3m				
F020	22:21	P45	1	S	C	S	4m	544			
F021	22:24	P45	1	NS	F			574		Arriving at Waypoint 5 (bat calling 22:24 - 22:25)	
F022	22:28	P45	1	S	F			614		At Waypoint 5	
F023	22:34	P45	1	NS	F			632		At Waypoint 5	
F024	22:43	Serotine	1	S	C	NE		694			
F025	22:50	P45	1	NS						Near Waypoint 4	
F026	22:57									Waypoint 4	
F027	23:09	Serotine	1	S	F	W		?			
F028	23:10	P45	1	NS	F						
F029	23:14	P45	1	NS	C			854			
F030	23:15	P45	1	NS	C					to 23:17	
F031	23:18	P55	1	NS	F			877		Soprano pipistrelle	
F032	23:19	P45	3	S	F	W	5m	883, 893, 918		to 23:22	
F033	23:31	P45	1	NS				941			
F034	23:36	Serotine						976		Arriving at Waypoint 3	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference	T6			Surveyor(s)	TJ TW		BA1: Bat - Activity (transect)		Date	23/07/2020
Survey Start (24 hours)	02:25	Survey End (24 hours)	05:25	Sunset		Sunrise	05:26	Detector / recording device type	Anabat Walkabout 4			
Transect ID	5	Transect start Eastings (X)	324834	Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)	12	Wind	0	Cloud Cover	50%	Rain	0	Weather Conditions (Description)	cool and dry morning			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F1	02:36:00	Common pipistrelle	1	NS	Unknown					Continues to 2:40	Confirmed	
F2	02:37:00	Soprano pipistrelle	1	NS	Unknown					Continues until 2:38	Confirmed	
F3	02:39:00	Soprano pipistrelle	1	NS	Unknown						Confirmed	
F4	02:41:00	Common pipistrelle	1	S	Foraging					Continues to 2:43	Confirmed	
F5	02:54:00	Common pipistrelle	1	NS	Unknown						Confirmed	
F6	02:56:00	Common pipistrelle	1	NS	Foraging					Continues to 2:57	Confirmed	
F7	03:28:00	Common pipistrelle	1	NS	Commuting						Confirmed	
F8	03:30:00	Common pipistrelle	1	NS	Commuting						Confirmed	
F9	03:35:00	Common pipistrelle	1	NS	Unknown					Continues to 3:36	Confirmed	
F10	03:51:00	Common pipistrelle	1	NS	Unknown					Continues to 3:52	Confirmed	
	04:00:00	Myotis sp.	1	NS	Unknown					Added during analysis.	Found in Analysis	
F11	04:01:00	Common pipistrelle	1	NS	Unknown					Continues to 4:03	Confirmed	
F12	04:02:00	Myotis sp.	1	NS	Unknown						Confirmed	
	04:11:00	Common pipistrelle	1	NS	Unknown					Added during analysis.	Found in Analysis	
F13	04:13:00	Common pipistrelle	1	NS	Foraging					Continues to 4:14	Confirmed	

BA1, BA3, BA4 - Bat activity survey proforma

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	04:14:00	Myotis sp.	1	NS	Unknown					Added during analysis.	Found in Analysis
F14	04:26:00	Common pipistrelle	1	NS	Foraging						Confirmed
F15	04:28:00	Common pipistrelle	1	NS	Foraging					continues to 4:29	Confirmed
F16	04:30:00	Common pipistrelle	1	NS	Foraging					continous until 04:32	Confirmed
F17	04:39:00	Soprano pipistrelle	1	NS	Foraging						Confirmed
	04:41:00	Noctule	1	NS	Commuting					Added during analysis.	Found in Analysis
F18	04:42:00	Common pipistrelle	1	NS	Foraging						Confirmed
F19	04:42:00	Nyctalus sp.	1	NS	Unknown						Not Recorded
F20	04:52:00	Common pipistrelle	1	NS	Unknown					Continues to 4:53	Confirmed
F21	04:55:00	Common pipistrelle	1	NS	Unknown					Continues to 4:58	Confirmed

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference	T6			Surveyor(s)	TJ TW		BA1: Bat - Activity (transect)		Date	23/07/2020
Survey Start (24 hours)	21:19	Survey End (24 hours)	23:19	Sunset	21:19	Sunrise		Detector / recording device type	Anabat Walkabout 6			
Transect ID	5	Transect start Eastings (X)	324834	Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)	18	Wind	2	Cloud Cover	80%	Rain	1	Weather Conditions (Description)	cool overcast			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F	21:40:00	Serotine	1	S	Commuting						Confirmed	
F2	21:42:00	Serotine	1	S	Foraging						Confirmed	
F3	21:45:00	Noctule	1	S	Commuting					Continues until 22:46	Confirmed	
	21:46:00	Serotine	1	NS	Unknown					Added during analysis	Found in Analysis	
F4	21:47:00	Common pipistrelle	2	S	Foraging					Continues until 22:49	Confirmed	
	21:47:00	Noctule	1	NS	Unknown					Added during analysis	Found in Analysis	
	21:50:00	Serotine	1	NS	Unknown					Added during analysis	Found in Analysis	
F5	21:51:00	Common pipistrelle	1	S	Commuting						Confirmed	
F6	21:53:00	Common pipistrelle	1	S	Foraging					Continues until 22:54	Confirmed	
F7	21:54:00	Noctule	1	NS	Unknown					Continues until 21:56	Confirmed	
F8	21:56:00	Lesser Horseshoe	1	NS	Unknown						Confirmed	
F9	21:57:00	Common pipistrelle	1	S	Foraging						Confirmed	
F10	21:59:00	Serotine	1	NS	Unknown						Confirmed	
	22:00:00	Myotis sp.	1	NS	Unknown					Added during analysis	Found in Analysis	
F11	22:01:00	Common pipistrelle	1	S	Foraging					Continues until 22:02	Confirmed	

BA1, BA3, BA4 - Bat activity survey proforma

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F12	22:03:00	Common pipistrelle	1	S	Foraging					continues until 22:04	Confirmed
F13	22:04:00	Serotine	1	S	Foraging					Continues until 22:06	Confirmed
F14	22:08:00	Soprano pipistrelle	1	S	Commuting						Confirmed
F15	22:13:00	Common pipistrelle	1	NS	Foraging					continuous to 22:18	Confirmed
	22:14:00	Serotine	1	NS	Unknown					Added during analysis	Found in Analysis
F16	22:19:00	Noctule	1	NS	Unknown						Confirmed
F17	22:24:00	Common pipistrelle	1	NS	Unknown					Continues until 22:26	Confirmed
F18	22:26:00	Soprano pipistrelle	1	NS	Unknown						Confirmed
F19	22:28:00	Soprano pipistrelle	1	NS	Commuting						Confirmed
F21	22:33:00	Common pipistrelle	1	NS	Unknown					Continues until 22:35	Confirmed
	22:46:00	Common pipistrelle	1	NS	Unknown					Added during analysis	Found in Analysis
	22:47:00	Long-eared bat	1	NS	Unknown					Added during analysis	Found in Analysis
F22	22:48:00	Serotine	1	NS	Unknown						Confirmed
F23	22:49:00	Common pipistrelle	1	NS	Unknown						Confirmed
F24	23:08:00	Noctule	1	NS	Unknown						Confirmed
F25	22:37:00	Common pipistrelle	1	NS	Unknown						Confirmed
F26	23:40:00	Common pipistrelle	1	NS	Unknown						Confirmed
F27	23:42:00	Long-eared bat	1	NS	Unknown						Confirmed
F28	23:45:00	Long-eared bat	1	NS	Unknown						Confirmed
F29	23:53:00	Common pipistrelle	1	NS	Unknown					Continues until 23:59	Confirmed
F30	23:57:00	Common pipistrelle	2	NS	Commuting						Confirmed
F31	00:07:00	Noctule	1	NS	Unknown						Confirmed
F32	00:08:00	Common pipistrelle	1	NS	Unknown					Continues until 00:10	Confirmed

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID	6		Land Parcel Reference	multiple			Surveyor(s)	JD TJ		Survey type	BA1: Bat - Activity (transect)		Date	08/08/2017	
Survey Start (24 hours)	20:45		Survey End (24 hours)	23:45		Sunset	20:45		Sunrise			Detector / recording device type	Anabat walkabout		
Transect ID	F006		Transect start Eastings (X)	331591		Transect start Northings (Y)	117771		Transect end Eastings (X)	331591		Transect end Northings (Y)	117771		
WEATHER CONDITIONS															
Air Temperature (°C)	12		Wind	0		Cloud Cover	3		Rain	0		Weather Conditions (Description)	Raining earlier during the day. Dry. Cool. Calm.		
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result				
F001	20:52	P.pip	2	S	F - Foraging	N/A	3		20:52	LP1 20:52:00-20:55. Two foraging and circling along the track for the length of LP1.	P.pip				
F002	21:08	P.pip	1	NS	Unknown	N/A			21:08		P.pip				
	21:13-21:16	STOP		N/A	No bats	N/A	N/A	N/A	21:13-21:16	LP 2	N/A				
F003	21:24	Unknown	1	NS	F - Foraging	N/A			21:24	LP3 21:24-21:27. Possible Brown long eared bat? (background noise, and insects some recordings left in folder as example)	N/A				
F004	21:36	E.ser	1	S	F - Foraging	SE	4		21:36	Foraging over the road.	E.ser				
	21:43	P.pip	1	NS	Unknown					Identified during analysis	P.pip				
	21:49	E.ser	1	NS	Unknown					Identified during analysis	E.ser				
F005	21:54	E.ser	1	NS	C - Commuting	N/A			21:54		E.ser				
F006	22:02	P.pip	1	S	F - Foraging	NE	3		22:02	LP5 22:02-22:06. one bat seen flying up and down hedgerow along road.	P.pip				
F007	22:05	P.pip	1	S	S - Socialising	N/A			22:04	LP5 - brief and quiet (amended to N.noc during analysis)	N.noc				
	22:07	P.pyg	1	NS	F - Foraging	N/A			22:07	Identified during analysis calls for 2mins	P.pyg				
	22:11	P.aur	1	NS	Unknown	N/A			22:11	Identified during analysis on brief call, most likely brown long ear	P.aur				
F008	22:12	P.pip	1	NS	F - Foraging	N/A			22:12	feeding buzz (calls on 50kHz no confirmation of species)	Pip sp.				
F009	22:12	P.pyg	1	S	S - Socialising	SW	5		22:12	seen flying over the road (calls on 50kHz no confirmation of species)	Pip sp.				
F010	22:13	E.ser	1	NS	C - Commuting	N/A			22:13	LP6 22:13-22:16	E.ser				
F011	22:16	P.pip	1	NS	Unknown	N/A			22:16	LP6	P.pip				

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F051											
F052											
F053											
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference	WS49918_WS44371/WS59858_WS59859			Surveyor(s)		JC and EC		Survey type	BA1: Bat - Activity (transect)		Date	10/10/2017		
Survey Start (24 hours)	18:33	Survey End (24 hours)	21:26	Sunset	18:33	Sunrise		Detector / recording device type and number	Anabat walkabout							
Transect ID	F006	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)								
WEATHER CONDITIONS																
Air Temperature (°C)	14	Wind	2	Cloud Cover	7	Rain	2	Weather Conditions (Description)	On and off torrential rain before survey began. Some short bursts of drizzle during first 10 minutes but was dry for remainder of survey							
OBSERVATIONS																
Point Counts	1	Start: 18:36 Finish: 18:39	2	Start: 19:09 Finish: 19:12	3	Start: 19:21 Finish: 19:24	4	Start: 19:41 Finish: 19:44	5	Start: 20:12 Finish: 20:15	6	Start: 20:24 Finish: 20:27	7	Start: 20:31 Finish: 20:34	8	Start: 20:43 Finish: 20:46
	9	Start: 21:14 Finish: 21:17	10	Start: 21:33 Finish: 21:36												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result				
F001	18:58	P.pyg	1	NS	C - Commuting	N/A										
F002	19:09	P.pyg	1	S	F - Foraging	E	2.5			2	single bat continuously circling along SE of woodland within the open field. Flying from east to west. Sometimes dropping down to below 2.5m					
F003	19:49	P.pip	1	NS	C - Commuting	N/A										
F004	19:52	P.pip	2	S	S - Socialising	N	5				Flying along field line within the open field. North to south direction					
F005	20:08	P.pip	1	S	C - Commuting	SE	3									
F006	20:24	N.noc	1	NS	Unknown	N/A				6	Unsure. Frequencies from 18-55kHz. Definitely a single bat. Same calls again at 20:26					
F007	20:37	E.ser	1	NS	C - Commuting	N/A					Two passes					
F008	20:48	P.pip	1	NS	C - Commuting	N/A										
F009	20:52	P.pip	1	NS	C - Commuting	N/A										
F010	20:55	Unknown	1	NS	Unknown	N/A										
F011	21:01	P.pip	1	NS	C - Commuting	SE					Assumed direction - commuting along hedgerow in a NW to SW direction					
F012	21:04	P.pip	1	NS	C - Commuting	SE										
F013	21:05	N.noc	1	NS	C - Commuting	SE										
F014	21:10	B.bar	1	NS	C - Commuting	N/A										

AW2

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID	Transect 7		Land Parcel Reference	A358 - BAT TRANSECT 7			Surveyor(s)	AM & LN	Survey type	BA1: Bat - Activity (transect)		Date	17/05/2017
Survey Start (24 hours)	20:38	Survey End (24 hours)	23:10	Sunset	20:58	Sunrise		Detector / recording device type	Batlogger Sottron D5				
Transect ID	7	Transect start Eastings (X)	324041	Transect start Northings (Y)		122775		Transect end Eastings (X)	324041	Transect end Northings (Y)		122775	
WEATHER CONDITIONS													
Air Temperature (°C)	12	Wind	1	Cloud Cover	7	Rain		Weather Conditions (Description)	Cool and slight breeze. No rain but it rained during the day.				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Notes	Sound analysis result			
F001	20:58								Waypoint 1				
F002	21:12								Waypoint 2				
F003	21:28								Waypoint 3				
F004	21:29	Noctule	1	NS	C				At Waypoint 3	Confirmed			
F005	21:32	Noctule	1	NS	C					Confirmed			
F006	21:34	Noctule	1	S	C	South	40m			Confirmed			
F007	21:38	Pip Pip	1	NS	F					Confirmed			
F008	21:40	Pip Pip	1	NS	C				Waypoint 4 (Arriving)	Confirmed			
F009	21:46	Pip Pip	1	NS	C				At Waypoint 4	Confirmed			
	21:47	Pip Pip								Confirmed			
F010	21:48	Pip Pip	2	S	F	South			At Waypoint 4	Confirmed			
F011	21:49	Pip Pip	1	S	F	East			The last bat at Waypoint 4	Confirmed			
F012	21:52	Pip Pip	1	NS	F				continuous pip	Confirmed			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Notes	Sound analysis result
F013	21:52	Noctule	1	NS	C					Confirmed
	21:59	Pip Pyg								Confirmed
F014	22:00								Waypoint 5	
F015	22:01	Serotine	1	NS	C				At Waypoint 5	confirmed
F016	22:05	Noctule	1	NS	C				At Waypoint 5	Confirmed
F017	22:09								Waypoint 6	
F018	22:19	Pip pip	1	NS	F				changed pip pyg to pip pip	Amended
F019	22:23								Waypoint 7	
	22:27	Barb								Amended
F020	22:28	Pip Pip	1	NS	F					Confirmed
F021	22:32								Waypoint 8	
F022	22:41	Serotine	1	NS	C				yes analysis deleted	Confirmed
F023	22:42	Pip Pip	1	NS	F				Between Waypoints 8-9 and over motorway bridge - Western side.	Confirmed
F024	22:43	Pip Pip	1	NS	C				Between Waypoints 8-9 and over motorway bridge - Western side.	Confirmed
F025	22:44	Pip Pip	2	NS	F				Between Waypoints 8-9 and over motorway bridge - Western side.	Confirmed
F026	22:45	Pip Pip	1	NS	F				Between Waypoints 8-9 and over motorway bridge - Western side.	Confirmed
F027	22:46	Pip Pip	2	NS	F				Between Waypoints 8-9 and over motorway bridge - Western side.	Confirmed
F028	22:48	Pip Pip	2	NS	F				Waypoint 9 (Arriving)	Confirmed

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference	A358 - BAT TRANSECT 7- Reverse			Surveyor(s)		AM & JD		Survey type	BA1: Bat - Activity (transect)		Date	14/06/2017
Survey Start (24 hours)	21:25	Survey End (24 hours)	00:28	Sunset	21:28	Sunrise		Detector / recording device type	Bat logger Sotten D3					
Transect ID	7	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS														
Air Temperature (°C)	17	Wind	1	Cloud Cover	20%	Rain	0	Weather Conditions (Description)	Cloudy, Mild, Warm					
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	21:37									Waypoint 10				
F002	21:37	Noctule	1	NS	C			71		Not seen, way point 10, brief	confirmed			
F003	21:40	Noctule	1	NS	C			75_2		Brief at Way point 10	confirmed			
F004	21:41	P.pip	1	NS	C			77		found on analysis	amended			
F005	21:41	P.pip	1	NS	C			78		found on analysis	amended			
F006	21:41	P.pip	1	NS	C			79		found on analysis	amended			
F007	21:42	P.pip	2	S	F	Circular	10m	80		Near waypoint 10, Feeding buzz, Foraging over houses and woodland edge /canopy.	confirmed			
F008	21:42	P.pip	1	NS	C			81		found on analysis	amended			
F009	21:42	P.pip	1	NS	C			82		found on analysis	amended			
F010	21:42	P.pip	1	NS	C			83		found on analysis	amended			
F011	21:42	P.pip	1	NS	C			84		found on analysis	amended			
F012	21:42	P.pip	1	NS	C			85		found on analysis	amended			
F013	21:42	P.pip	1	NS	C			86		found on analysis	amended			
F014	21:42	P.pip	1	NS	C			87		found on analysis	amended			
F015	21:42	P.pip	1	NS	C			88		found on analysis	amended			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	21:42	P.pip	1	NS	C			89		found on analysis	amended
F017	21:42	P.pip	1	NS	C			90		found on analysis	amended
F018	21:42	P.pip	1	NS	C			91		found on analysis	amended
F019	21:42	P.pip	1	NS	C			92		found on analysis	amended
F020	21:42	P.pip	1	NS	C			93		found on analysis	amended
F021	21:42	P.pip	1	NS	C			94		found on analysis	amended
F022	21:43	P.pip	1	NS	F			95		found on analysis	amended
F023	21:43	P.pip	1	NS	F			96		found on analysis	amended
F024	21:43	P.pip	1	NS	C			97		found on analysis	amended
F025	21:43	P.pip	1	NS	C			98		found on analysis	amended
F026	21:43	P.pip	1	NS	C			99		found on analysis	amended
F027	21:43	P.pip	1	NS	C			100		found on analysis	amended
F028	21:43	P.pip	1	NS	C			101		found on analysis	amended
F029	21:43	P.pip	1	NS	F			102		found on analysis	amended
F030	21:45	P.pip	1	NS	F			106		Brief call near 10 - changed track no.	amended
F031	21:46	P.pip	1	NS	F			107		found on analysis	amended
F032	21:47	P.pip	1	NS	F			110		found on analysis	amended
F033	21:49	M.dau	1	NS	F			114		found on analysis	amended
F034	21:49	M.dau	1	NS	F			115		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F035	21:49	M.dau	1	NS	F			116		found on analysis	amended
F036	21:49	N.noc	1	NS	C			117		near way point 9	confirmed
F037	21:50	P.pip	1	NS	F			120		found on analysis	amended
F038	21:50	P.pip	1	NS	F			121		found on analysis	amended
F039	21:50	Pip 45	1	NS	C			123		near waypoint 9	confirmed
F040	21:50	P.pip	1	NS	F			124		found on analysis	amended
F041	21:53	P.pip	1	NS	F			127		found on analysis	amended
F042	21:53	P.pip	1	S	F	NW	4m	129		Continuous foraging for 5 mins at way point 9. - changed time	amended
F043	21:54	P.pip	1	NS	F			131		found on analysis	amended
F044	21:54	P.pip	1	NS	F			132		found on analysis	amended
F045	21:54	P.pip	1	NS	F			133		found on analysis	amended
F046	21:54	P.pip	1	NS	F			134		found on analysis	amended
F047	21:55	P.pip	1	NS	F			135		found on analysis	amended
F048	21:56	P.pip	1	NS	F			139		found on analysis	amended
F049	21:56	P.pip	1	NS	F			140		found on analysis	amended
F050	21:56	P.pip	1	NS	F			141		found on analysis	amended
F051	21:56	P.pip	1	NS	F			142		found on analysis	amended
F052	21:57	P.pip, P.pyg	2	S	F	N and S	3m	143		Continuous foraging along road near wp9	confirmed
F053	21:57	P.pip	1	NS	F			144		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F054	21:57	P.pip	1	NS	F			145		found on analysis	amended
F055	21:57	P.pip	1	NS	F			146		found on analysis	amended
F056	21:57	P.pip	1	NS	F			147		found on analysis	amended
F057	21:57	P.pip	1	NS	C			148		found on analysis	amended
F058	21:57	P.pip	1	NS	F			149		found on analysis	amended
F059	21:58	P.pip	1	NS	F			151		found on analysis	amended
F060	21:58	P.pip	1	NS	C			153		found on analysis	amended
F061	21:59	P.pip	1	NS	C			155		found on analysis	amended
F062	21:59	P.pip	1	NS	C			156		found on analysis	amended
F063	21:59	P.pip	2	S	F	Circular	3m	157		Continous foraging along road near wp9	confirmed
F064	21:59	P.pip	2	S	F	Circular	3m	158		Continous foraging along road near wp9	confirmed
F065	22:00	P.pip	2	S	F	Circular	3m	159		Continous foraging along road near wp9	confirmed
F066	22:00	P.pip, P.pyg	2	S	F	Circular	3m	160		Continous foraging along road near wp9	confirmed
F067	22:00	P.pip	1	NS	C			161		found on analysis	amended
F068	22:00	P.pip	1	NS	C			162		found on analysis	amended
F069	22:00	P.pip	1	NS	C			163		found on analysis	amended
F070	22:00	P.pip	1	NS	S			164		found on analysis	amended
F071	22:01	P.pip	1	NS	S			165		found on analysis	amended
F072	22:01	P.pip	1	NS	S			166		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F073	22:01	P.pip	1	NS	S			167		found on analysis	amended
F074	22:01	P.pip	1	NS	S			168		found on analysis	amended
F075	22:01	P.pip, E.ser	2	NS	C			169		Continuous foraging along road near wp9 - added in pip and changed track no.	amended
F076	22:02	P.pyg	1	NS	C			171		found on analysis	amended
F077	22:02	P.pip	1	NS	C			172		found on analysis	amended
F078	22:02	P.pip	1	NS	F			173		found on analysis	amended
F079	22:02	P.pip	1	NS	F			174		found on analysis	amended
F080	22:02	P.pip	1	NS	F			175		found on analysis	amended
F081	22:03	P.pip	1	NS	F			177		found on analysis	amended
F082	22:03	P.pip	1	NS	F			178		found on analysis	amended
F083	22:03	P.pip	2	NS	F			179		found on analysis	amended
F084	22:03	P.pip	1	NS	F			180		found on analysis	amended
F085	22:03	P.pip	1	NS	F			181		found on analysis	amended
F086	22:03	P.pip	1	NS	F			182		found on analysis	amended
F087	22:03	P.pip	1	NS	F			183		found on analysis	amended
F088	22:04	P.pip	1	NS	F			184		found on analysis	amended
F089	22:04	P.pip	1	NS	F			185		found on analysis	amended
F090	22:04	P.pip	1	NS	F			186		found on analysis	amended
F091	22:04	P.pip	2	S	F	Circular	2m	189		Continuous foraging along road near wp9 - removed P.pyg only heard one type of call	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F092	22:05	P.pip	1	NS	F			190		found on analysis	amended
F093	22:05	P.pip	1	NS	F			191		found on analysis	amended
F094	22:06	P.pip	1	S	C	S	10m	193		Commuted over motorway - changed track no.	amended
F095	22:09	Serotine	1	NS	C	N and SW	3-4m	201		Foraging over road, south side of motorway - removed P.pip	amended
F096	22:09	P.pip	1	NS	F			202		found on analysis	amended
F097	22:10	E.ser	1	NS	F			204		found on analysis	amended
F098	22:11	P.pip	1	NS	F			205		found on analysis	amended
F099	22:11	E.ser, P.pip	2	NS	C	N and SW	3-4m	206		Foraging over road, south side of motorway - changed time	amended
F100	22:11	P.pip	1	NS	F			207		found on analysis	amended
F101	22:11	P.pip	1	NS	F			208		found on analysis	amended
F102	22:11	P.pip	1	NS	F			209		found on analysis	amended
F103	22:12	P.pip	1	NS	F			210		found on analysis	amended
F104	22:12	P.pip	1	NS	F			211		found on analysis	amended
F105	22:12	P.pip	2	NS	F			212		found on analysis	amended
F106	22:12	P.pip	1	NS	F			213		found on analysis	amended
F107	22:12	P.pip	1	NS	F			214		found on analysis	amended
F108	22:12	P.pip	1	NS	F			216		found on analysis	amended
F109	22:12	P.pip	1	NS	F			217		found on analysis	amended
F110	22:12	P.pip	1	NS	F			218		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F111	22:14	P.pip	2	S	F	Circular	3m	219		Foraging over road, 100m from motorway	confirmed
F112	22:14	P.pip	1	NS	F			220		found on analysis	amended
F113	22:14	P.pip	1	NS	F			222		found on analysis	amended
F114	22:14	P.pip	1	NS	F			223		found on analysis	amended
F115	22:14	P.pip	1	NS	F			224		found on analysis	amended
F116	22:15	P.pip	1	NS	F			225		found on analysis	amended
F117	22:16	P.pip	1	NS	F			227		found on analysis	amended
F118	22:16	P.pip	1	NS	F			228		found on analysis	amended
F119	22:16	P.pip	1	NS	C			229		found on analysis	amended
F120	22:16	P.pip	1	NS	C			230		found on analysis	amended
F121	22:16	P.pip	1	NS	F			233		found on analysis	amended
F122	22:16	P.pip	1	NS	F			234		found on analysis	amended
F123	22:16	P.pip	1	NS	F			235		found on analysis	amended
F124	22:16	P.pip	1	NS	F			236		found on analysis	amended
F125	22:16	P.pip	1	NS	F			237		found on analysis	amended
F126	22:17	P.pip	1	NS	F			238		found on analysis	amended
F127	22:17	P.pip	1	NS	F			239		found on analysis	amended
F128	22:17	P.pip	1	NS	F			240		found on analysis	amended
F129	22:17	P.pip	2	S	F	Circular	3m	241		Foraging in orchard, next to entrance	confirmed

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F130	22:17	P.pip	1	NS				242		found on analysis	amended
F131	22:17	P.pip	1	NS	F			243		found on analysis	amended
F132	22:17	P.pip	2	S	F	Circular	3m	244		Foraging in orchard, next to entrance	confirmed
F133	22:18	P.pip	1	NS				245		found on analysis	amended
F134	22:18	P.pip	1	NS				246		found on analysis	amended
F135	22:18	P.pip	1	NS				247		found on analysis	amended
F136	22:18	P.pip	1	NS				248		found on analysis	amended
F137	22:18	P.pip	1	NS				249		found on analysis	amended
F138	22:20	P.pip	2	S	C and F	NW	3m	251		Foraging in orchard - changed from P.pyg to P.pip	amended
F139	22:21	P.pip	1	NS	C			252		found on analysis	amended
F140	22:21	P.pip	1	NS	F			255		found on analysis	amended
F141	22:23	P.pip	1	NS	F			260		found on analysis	amended
F142	22:23	P.pip	2	S	F	Circular	4m	261		At waypoint 8. Feeding buzz - removed P.pyg only sounded like one type of call	amended
F143	22:23	P.pip	1	NS	F			262		found on analysis	amended
F144	22:23	P.pip	1	NS	F			263		found on analysis	amended
F145	22:23	P.pip	1	NS	F			264		found on analysis	amended
F146	22:23	P.pip	1	NS	F			265		found on analysis	amended
F147	22:24	P.pip	2	S	F	Circular	4m	266		At waypoint 8. Feeding buzz - removed P.pyg only sounded like one type of call	amended
F148	22:23	P.pip, P.pyg	2	NS	F			267		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F149	22:24	P.pip	1	NS	F			268		found on analysis	amended
F150	22:24	P.pip	1	NS	F			269		found on analysis	amended
F151	22:24	P.pip	1	NS	F			270		found on analysis	amended
F152	22:27	P.pyg	1	NS	C			281		found on analysis	amended
F153	22:27	P.pip	1	NS	F			282		found on analysis	amended
F154	22:28	P.pip	1	NS	C			284		found on analysis	amended
F155	22:29	P.pip	1	NS	F			293		found on analysis	amended
F156	22:29	P.pip	1	NS	F			294		found on analysis	amended
F157	22:30	P.pip	1	NS	F			296		found on analysis	amended
F158	22:31	M.sp	1	NS	F			297		found on analysis - not sure what type of myotis it is	amended
F159	22:32	P.pip	1	NS	F			300		found on analysis	amended
F160	22:32	P.pip	1	NS	F			302		Near Way point 7 and solar panels	confirmed
F161	22:32	P.pip	1	S	C	NW and S	4M	303		Seen near Solar panels - changed track no.	amended
F162	22:34	P.pip	1	NS	F			307		found on analysis	amended
F163	22:35	P.pip	1	NS	F			309		found on analysis	amended
F164	22:36	P.pyg	2	NS	C			315		At waypoint 7 - removed P.pip	amended
F165	22:37	P.pip	1	NS	C			316		found on analysis	amended
F166	22:37	P.pip	1	NS	C			317		found on analysis	amended
F167	22:38	E.ser	1	NS	C			319		At waypoint 7	confirmed

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F168	22:41	P.pip	1	NS	C			337		found on analysis	amended
F169	22:44	P.pip	1	NS	F			370		Feeding buzz at gate of solar panel field	confirmed
F170	22:44	P.pip	1	NS	F			371		found on analysis	amended
F171	22:44	P.pip	1	NS	F			372		found on analysis	amended
F172	22:44	P.pip	1	NS	F			373		found on analysis	amended
F173	22:45	P.pip	1	NS	F			374		found on analysis	amended
F174	22:45	P.pip	1	NS	F			376		found on analysis	amended
F175	22:45	P.pip	1	NS	F			377		found on analysis	amended
F176	22:45	P.pip	1	NS				380		found on analysis	amended
F177	22:46	P.pip	1	NS	F			381		found on analysis	amended
F178	22:46	P.pip	1	NS	F			382		found on analysis	amended
F179	22:46	P.pip	1	NS	F			383		found on analysis	amended
F180	22:46	P.pip	1	NS	F			384		found on analysis	amended
F181	22:46	P.pip	1	NS	F			385		found on analysis	amended
F182	22:46	P.pip	1	NS	F			386		found on analysis	amended
F183	22:50	P.pip	1	NS	F			427		found on analysis	amended
F184	22:50	P.pip	1	NS	F			428		found on analysis	amended
F185	22:50	P.pip	2	NS	F			429		Feeding buzz at waypoint 6 - removed P.pyg and changed time	amended
F186	22:51	P.pip	1	NS	F			430		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F187	22:51	P.pip	1	NS	F			431		found on analysis	amended
F188	22:51	P.pip	1	NS	C			432		found on analysis	amended
F189	22:51	P.pip	1	NS	F			433		found on analysis	amended
F190	22:51	P.pip	1	NS	F			434		found on analysis	amended
F191	22:51	P.pip	1	NS	C			435		found on analysis	amended
F192	22:52	P.pip	1	NS	C			436		found on analysis	amended
F193	22:53	P.pyg	1	NS	C			439		found on analysis	amended
F194	22:54	P.pip	1	NS	C			436		found on analysis	amended
F195	22:54	P.pip	1	NS	C			440		found on analysis	amended
F196	22:55	P.pip	1	NS	C			446		found on analysis	amended
F197	22:55	P.pip	1	NS	F			448		found on analysis	amended
F198	22:56	P.pip	1	NS	F			449		found on analysis	amended
F199	22:56	P.pip	1	NS	F			451		found on analysis	amended
F200	22:56	P.pip	1	NS	F			452		found on analysis	amended
F201	22:56	P.pip	2	NS	F			455		Feeding buzz in racecourse entrance - removed P.pyg	amended
F202	22:56	P.pip	2	NS	F			456		found on analysis	amended
F203	22:57	P.pip	1	NS	F			457		found on analysis	amended
F204	22:57	P.pip	1	NS	F			458		found on analysis	amended
F205	22:57	P.pip	1	NS	F			459		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F206	22:57	P.pip	1	NS	F			460		found on analysis	amended
F207	22:57	P.pip	1	NS	F			461		found on analysis	amended
F208	22:57	P.pip	1	NS	F			462		found on analysis	amended
F209	22:58	P.pip	1	NS	c			463		found on analysis	amended
F210	22:58	P.pip	1	NS	c			465		found on analysis	amended
F211	23:01	P.pip	1	NS	c			499		found on analysis	amended
F212	23:01	P.pip	1	NS	F			500		Middle of race course	confirmed
F213	23:01	P.pip	1	NS	c			501		found on analysis	amended
F214	23:02	P.pip	1	NS	c			506		found on analysis	amended
F215	23:04	P.pip	1	NS	c			519		found on analysis	amended
F216	23:05	P.pip	1	NS	c			537		found on analysis	amended
F217	23:06	P.pip	2	NS	F			538		At way point 5 - changed time	amended
F218	23:06	P.pip	1	NS	c			539		found on analysis	amended
F219	23:06	P.pip	1	NS	c			540		found on analysis	amended
F220	23:06	P.pip	1	NS	c			541		found on analysis	amended
F221	23:07	E.ser, P.pip	2	NS	C			546		At way point 5 - sounds like two different calls	amended
F222	23:07	P.pip	1	NS	c			547		found on analysis	amended
F223	23:08	P.pip	1	NS	F			548		found on analysis	amended
F224	23:08	P.pip	1	NS	F			549		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F225	23:11	P.pip	1	NS	F			564		found on analysis	amended
F226	23:11	P.pip	1	NS	F			565		found on analysis	amended
F227	23:13	P.pip	1	NS	C			578		near entrance	confirmed
F228	23:14	P.pip	1	NS	F			581		found on analysis	amended
F229	23:21	P.pip	1	NS	C			625		near entrance	confirmed
F230	23:22	P.pip	1	NS	C			628		near entrance	confirmed
F231	23:22	E.ser	1	NS	F			638		on race course	confirmed
F232	23:22	E.ser	1	NS	F			639		found on analysis	amended
F233	23:24	P.pip	1	NS	F			640		found on analysis - weird marking for a pip	amended
F234	23:24	P.pip	1	NS	F			641		found on analysis - weird marking for a pip	amended
F235	23:26	P.pip	1	NS	F			648		found on analysis - weird marking for a pip	amended
F236	23:26	P.pip	1	NS	C			651		found on analysis - weird marking for a pip	amended
F237	23:28	E.ser	1	NS	C			670		Brief call, way point 4	
F238	23:30	P.pip	1	NS	F			675		found on analysis - weird marking for a pip	amended
F239	23:30	P.pip	1	NS	F			676		Brief call, way point 4	confirmed
F240	23:35	P.pip	1	NS	C			691		found on analysis - weird marking for a pip	amended
F241	23:35	P.pip	1	NS	C			692		found on analysis - weird marking for a pip	amended
F242	23:35	P.pip	1	NS	C			693		on road between wp4 and 3	confirmed
F243	23:38	P.pip	1	NS	C			715		found on analysis - weird marking for a pip	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F246	23:52	P.pip	1	NS	F			766		Brief call at Way point 3	confirmed
F247	23:54	P.pip	1	NS	F			769		found on analysis	amended
F253	00:01	P.pip	1	NS	C			794		found on analysis	amended
F254	00:02	P.pip	1	NS	C			795		way point 2	confirmed
F255	00:04	P.pip	1	NS	C			799		way point 2	confirmed
F256	00:04	P.pip	1	NS	C			800		way point 2	confirmed
F257	00:13]]		NS						way point 1	
F258	00:12	P.pip	1	NS	C			816		way point 1 - changed track no.	amended
F259	00:16	unknown	1	NS	F			829		found on analysis	amended
F260	00:17	P.pip	1	NS	C			832		on road next to motorway - changed track no. and time	amended
F261	00:18	P.pip	1	NS	C			837		found on analysis	amended
F262	00:19	P.pip	1	NS	C			838		found on analysis	amended
F263	00:19	P.pip	1	NS	C			839		found on analysis	amended
F264	00:19	P.pip	1	NS	C			841		found on analysis	amended
F265	00:19	P.pip	1	NS	C			842		found on analysis	amended
F266	00:20	P.pip	1	NS	F			850		found on analysis	amended
F267	00:21	P.pip	1	NS	F			854		found on analysis	amended
F268	00:21	P.pip	1	NS	F			855		on road next to motorway	confirmed
F269	00:21	P.pip	1	NS	F			857		found on analysis	amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F270	00:22	P.pip	1	NS	F			858		found on analysis	amended
F271	00:22	P.pip	1	NS	F			859		found on analysis	amended
F272	00:23	P.pip	1	NS	F			866		found on analysis	amended
F273	00:24	P.pip	1	NS	F			869		found on analysis	amended
F274	00:27	unknown	1	NS	F			888		found on analysis	amended
F275	00:28	P.pip	1	NS	F			889		found on analysis	amended
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY											
Ecology ID		Land Parcel Reference		Surveyor(s)		SW + TJ		Survey type		Date	
								BA1: Bat - Activity (transect)		19/07/2017	
Survey Start (24 hours)		Survey End (24 hours)		Sunset		Sunrise		Detector / recording device type		Elekon batlogger	
21:16		11:56		21:16							
Transect ID	Transect start Eastings (X)	Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
F001											
WEATHER CONDITIONS											
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)		rain 21:30, 22:45, 23:30	
24		0		8		2					
OBSERVATIONS											
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F001	21:34	P.pyg	1	NS	F - Foraging			64		found on analysis	amended
F002	21:35	P.pyg	1	NS	F - Foraging			65		found on analysis	amended
F003	21:35	P.pyg	1	NS	F - Foraging			70		freq 52, LP2 - changed track no.	amended
F004	21:36	P.pyg	1	NS	F - Foraging			74		found on analysis	amended
F005	21:36	P.pyg	1	NS	F - Foraging			76		found on analysis	amended
F006	21:36	P.pyg	1	NS	F - Foraging			77		found on analysis	amended
F007	21:36	P.pyg	1	NS	F - Foraging			78		found on analysis	amended
F008	21:36	P.pyg	1	NS	F - Foraging			79		found on analysis	amended
F009	21:37	P.pyg	1	NS	F - Foraging			81		freq 56, LP2	confirmed
F010	21:37	P.pyg	1	NS	F - Foraging			83		found on analysis	amended
F011	21:37	P.pyg	1	NS	F - Foraging			84		found on analysis	amended
F012	21:37	P.pyg	1	NS	F - Foraging			85		found on analysis	amended
F013	22:01	P.pip	1	NS	F - Foraging			156		found on analysis	amended
F014	22:02	P.pip	1	NS	F - Foraging			160		freq 46, LP4 - changed track no.	
F015	22:03	P.pip	1	NS	F - Foraging			162		freq 46, LP4 - changed track no.	
F016	22:04	P.pip	1	NS	F - Foraging			167		changed track no.	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F017	22:07	P.pip	1	NS	F - Foraging			176		Just by race course stands (point 4) - changed track no.	
F018	22:08	P.pip	1	NS	F - Foraging			180		found on analysis	amended
F019	22:08	P.pip	1	NS	F - Foraging			181		found on analysis	amended
F020	22:09	P.pip	1	NS	F - Foraging			182		Just by race course stands (point 4)	confirmed
F021	22:09	P.pip	1	NS	F - Foraging			183		found on analysis	amended
F022	22:09	P.pip	1	NS	F - Foraging			184		found on analysis	amended
F023	22:09	P.pip	1	NS	F - Foraging			185		found on analysis	amended
F024	22:10	P.pip	1	NS	C - Commuting			186		found on analysis	amended
F025	22:10	P.pip	1	NS	C - Commuting			187		found on analysis	amended
F026	22:14	P.pyg	1	NS	C - Commuting			198		found on analysis	amended
F027	22:14	P.pyg	1	NS	F - Foraging			200		just before point 5	
F028	22:14	P.pyg	1	NS	C - Commuting			201		found on analysis	amended
F029	22:16	P.pip	1	NS	F - Foraging			204		LP5 changed track no.	
F030	22:16	P.pip	1	NS	F - Foraging			205		LP5 changed track no.	
F031	22:18	P.pip	1	NS	F - Foraging			212		LP5 - changed track no.	
F032	22:18	P.pip	1	NS	F - Foraging			213		found on analysis	
F033	22:18	P.pip	1	NS	C - Commuting			214		found on analysis	
F034	22:19	P.pip	2	NS	F - Foraging			217		(finishes track 218) LP5 - changed track no.	
F035	22:19	P.pip	2	NS	C - Commuting			219		found on analysis	
F036	22:20	P.pip	1	NS	C - Commuting			222		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F037	22:20	P.pip	1	NS	C - Commuting			224		found on analysis	
F038	22:23	P.pip	1	NS	C - Commuting			241		found on analysis	
F039	22:24	P.pip	1	NS	C - Commuting			247		found on analysis	
F040	22:24	P.pip	1	NS	C - Commuting			248		found on analysis - &Leisler	
F041	22:24	P.pip	1	NS	C - Commuting			249		found on analysis	
F042	22:25	P.pip	1	NS	F - Foraging			250		just before LP6	confirmed
F043	22:25	P.pip	1	NS	C - Commuting			252		found on analysis	
F044	22:29	P.pip	1	NS	F - Foraging			275		(finishes track 279) LP6 - changed time	
F045	22:29	P.pyg	1	NS	F - Foraging			278		found on analysis	
F046	22:29	P.pyg	1	NS	F - Foraging			279		found on analysis	
F047	22:29	N.noc	1	NS	C - Commuting			280		found on analysis	
F048	22:32	P.pip	1	NS	F - Foraging			290		changed track no.	
F049	22:32	P.pip	1	NS	C - Commuting			291		found on analysis	
F050	22:32	P.pip	1	NS	C - Commuting			292		found on analysis	
F051	22:32	P.pip	1	NS	C - Commuting			293		found on analysis	
F052	22:32	P.pip	1	NS	F - Foraging			294		found on analysis	
F053	22:37	P.pip	1	NS	F - Foraging			302		changed track no.	
F054	22:43		1	NS	F - Foraging			318		changed track no.	
F055	22:45	P.pip	1	NS	F - Foraging			321		found on analysis	
F056	22:45	P.pip	1	NS	F - Foraging			322		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F057	22:45	P.pip	1	NS	F - Foraging			323		found on analysis	
F058	22:45	P.pip	1	NS	F - Foraging			324		LP7	confirmed
F059	22:45	P.pip	1	NS	F - Foraging			325		found on analysis	
F060	22:45	P.pip	1	NS	F - Foraging			326		found on analysis	
F061	22:45	P.pip	1	NS	F - Foraging			327		found on analysis	
F062	22:46	P.pip	1	NS	F - Foraging			329		found on analysis	
F063	22:46	P.pip	1	NS	F - Foraging			333		LP7 - changed track no.	
F064	22:49	P.pip	1	NS	C - Commuting			340		before LP8 - changed track no.	
F065	22:49	P.pip	1	NS	F - Foraging			348		found on analysis	
F066	22:50	P.pip	1	NS	C - Commuting			349		found on analysis	
F067	22:50	P.pip	1	NS	F - Foraging			350		found on analysis	
F068	22:50	P.pip	1	NS	F - Foraging			351		found on analysis	
F069	22:50	P.pip	1	NS	F - Foraging			353		found on analysis	
F070	22:50	P.pip	1	NS	F - Foraging			354		found on analysis	
F071	22:50	P.pip	1	NS	F - Foraging			355		found on analysis	
F072	22:50	P.pip	1	NS	F - Foraging			356		found on analysis	
F073	22:50	P.pip	1	NS	F - Foraging			357		found on analysis	
F074	22:50	P.pip	1	NS	F - Foraging			358		found on analysis	
F075	22:50	P.pip	1	NS	F - Foraging			359		found on analysis	
F076	22:50	P.pip	1	NS	F - Foraging			360		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F077	22:51	P.pip	1	NS	F - Foraging			361		found on analysis	
F078	22:51	P.pip	1	NS	F - Foraging			363		found on analysis	
F079	22:56	P.pip	1	NS	F - Foraging			385		(finished track 354) LP8 - changed track no.	
F080	22:56	P.pip	1	NS	F - Foraging			387		LP8 - changed track no.	
F081	22:57	P.pip	1	NS	C - Commuting			388		found on analysis	
F082	22:58	P.pip	1	NS	F - Foraging			393		found on analysis	
F083	22:58	P.pip	1	S	F - Foraging	S		394		(finishes track 396) after LP8 - around orchard edge	confirmed
F084	22:58	P.pip	1	NS	F - Foraging			395		found on analysis	
F085	22:58	P.pip	1	NS	F - Foraging			396		found on analysis	
F086	22:58	P.pip	1	NS	F - Foraging			397		found on analysis	
F087	22:59	P.pip	1	NS	F - Foraging			399		found on analysis	
F088	23:02	P.pip	2	S	F - Foraging	N		407		(finishes track 412) along lane - changed track no. & time	
F089	23:02	P.pip	1	NS	F - Foraging			408		found on analysis	
F090	23:02	P.pip	1	NS	F - Foraging			409		found on analysis	
F091	23:02	P.pip	1	NS	F - Foraging			411		found on analysis	
F092	23:03	P.pip	1	NS	F - Foraging			412		found on analysis	
F093	23:04	N.noc	1	NS	F - Foraging			422		found on analysis	
F094	23:05	P.pip	1	NS	F - Foraging			424		found on analysis	
F095	23:07	P.pip	1	NS	F - Foraging			429		(finishes track 437) before LP9	confirmed
F096	23:07	P.pip	1	NS	F - Foraging			434		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F097	23:08	P.pip	1	NS	F - Foraging			437		found on analysis	
F098	23:08	P.pip	1	NS	F - Foraging			438		found on analysis	
F099	23:11	P.pip	1	NS	F - Foraging			459		found on analysis	
F100	23:11	P.pip	2	NS	F - Foraging			460		LP9	confirmed
F101	23:12	P.pip	1	NS	F - Foraging			472		LP9	confirmed
F102	23:12	P.pip	1	NS	C - Commuting			473		found on analysis	
F103	23:13	P.pip	1	NS	F - Foraging			478		LP9	confirmed
F104	23:13	P.pip	1	NS	F - Foraging			479		found on analysis	
F105	23:13	P.pip	1	NS	F - Foraging			480		found on analysis	
F106	23:13	P.pip	1	NS	F - Foraging			483		found on analysis	
F107	23:15	P.pip	1	NS	F - Foraging			491		(finishes track 494) after LP9	confirmed
F108	23:15	P.pip	2	S	F - Foraging			496		(finishes track 500) F under lamposts on Killam Ave.	confirmed
F109	23:16	P.pip	1	NS	F - Foraging			497		found on analysis	
F110	23:16	P.pip	1	NS	F - Foraging			498		found on analysis	
F111	23:16	P.pip	1	NS	F - Foraging			499		found on analysis	
F112	23:16	P.pip	1	NS	F - Foraging			500		found on analysis	
F113	23:16	P.pip	1	NS	F - Foraging			501		found on analysis	
F114	23:17	P.pip	1	NS	F - Foraging			502		found on analysis	
F115	23:17	P.pip	1	NS	F - Foraging			503		found on analysis	
F116	23:17	P.pip	1	NS	F - Foraging			504		found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F117	23:17	P.pip	1	NS	F - Foraging			505		found on analysis	
F118	23:17	P.pip	1	NS	F - Foraging			510		found on analysis	
F119	23:22	E.ser	1	NS	F - Foraging			531		found on analysis	
F120	23:25	N.noc	1	NS	C - Commuting			535		freq 29 (LP10)	confirmed
F121	23:29	P.pip	1	NS	F - Foraging			547		(finishes 549) just after LP10 - potentially a E.ser or 2 pips?	
F122	23:29	P.pip	1	NS	F - Foraging			549		found on analysis	
F123	23:31	P.pip	1	NS	F - Foraging			550		Killam Close	confirmed
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID	7		Land Parcel Reference	multiple			Surveyor(s)	JD TJ		Survey type	BA1: Bat - Activity (transect)		Date	09/08/2017
Survey Start (24 hours)	20:45		Survey End (24 hours)	23:45	Sunset	20:45		Sunrise			Detector / recording device type	Anabat walkabout		
Transect ID	F007	Transect start Eastings (X)	324151		Transect start Northings (Y)	122509			Transect end Eastings (X)	324151		Transect end Northings (Y)	324151	
WEATHER CONDITIONS														
Air Temperature (°C)	15		Wind	1	Cloud Cover	8		Rain	0		Weather Conditions (Description)	overcast and dry		
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
LP1	20:56-20:59	STOP		N/A	No Bats	N/A	N/A	N/A	20:56-20:59	LP1				
LP2	21:12-21:15	STOP		N/A	No bats	N/A	N/A	N/A	21:12-21:15	LP2				
LP3	21:23-21:26	STOP		N/A	No Bats	N/A	N/A	N/A	21:23-21:26	LP3				
F001	21:29	P.pip	1	NS						found on analysis				
F001	21:29	P.pip	1	NS						found on analysis				
F001	21:30	P.pip	1	NS						found on analysis				
F001	21:30	P.pip	1	NS	F - Foraging	Unk	Unk		21:30	confirmed				
F001	21:30	P.pip	1	NS	F - Foraging					found on analysis				
F001	21:30	P.pip	1	NS	F - Foraging					found on analysis				
F001	21:38	P.pip	1	NS	C - Commuting					found on analysis				
F002	21:40	P.pip	1	NS	C - Commuting	Unk	Unk		21:39	LP4				
F003	21:45	P.pip	1	S	F - Foraging	N/A	4		21:45	Foraging in a circle direction around mature tree over racecourse	confirmed			
F001	21:45	P.pip	1	NS	C - Commuting					found on analysis				
F001	21:46	P.pip	1	NS	C - Commuting					found on analysis				
F001	21:46	P.pip	1	NS	C - Commuting					found on analysis				
F001	21:46	P.pip	1	NS	C - Commuting					found on analysis				

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F001	21:46	P.pip	1	NS	C - Commuting					found on analysis - potentially a n.lei aswell?	
F001	21:47	P.pip	1	NS	C - Commuting					found on analysis & n.noc commuting	
LP5	21:53-21:56	STOP		N/A	No Bats	N/A	N/A	N/A	21:53-21:56	LP5	
F001	21:56	P.aur	1	NS	C - Commuting					found on analysis - I think its that	
F004	21:58	P.pip	1	S	F - Foraging	N/A	4		21:58	Foraging in a circle direction around mature tree over racecourse. Feeding buzz and near LP5.	confirmed
F001	21:58	P.pip	1	NS	F - Foraging					found on analysis	
F001	21:59	P.pip	1	NS	F - Foraging					found on analysis	
F001	21:59	P.pip	1	NS						found on analysis	
F001	22:00	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:00	P.pip	1	NS	F - Foraging					found on analysis	
F005	22:03	P.pip	1	NS	F - Foraging	Unk	Unk		22:03		confirmed
F001	22:03	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:03	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:04	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:05	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:05	P.pip	1	NS	F - Foraging					found on analysis	
LP6	22:06-22:09	STOP		N/A	No Bats	N/A	N/A	N/A	22:06-22:09	LP6	
F001	22:08	P.pip	1	NS	C - Commuting					found on analysis	
F001	22:08	P.pip	1	NS	C - Commuting					found on analysis	
F001	22:09	P.pip	1	NS	C - Commuting					found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F001	22:09	P.pip	1	NS	C - Commuting					found on analysis	
F001	22:09	P.pip	1	NS	C - Commuting					found on analysis	
F001	22:11	P.pip	1	NS	C - Commuting					found on analysis	
F006	22:12	P.pip	1	NS	F - Foraging	Unk	Unk		22:12		confirmed
F001	22:14	P.pip	1	NS	C - Commuting					found on analysis	
LP8	22:16-22:19	STOP		N/A	No Bats	N/A	N/A	N/A	22:16-22:19	LP8	
F001	22:19	P.pip	1	NS	C - Commuting					found on analysis	
F001	22:19	P.pip	1	NS	C - Commuting					found on analysis	
F007	22:24	P.pip	1	NS	F - Foraging	Unk	Unk		22:24	LP7	confirmed
F001	22:24	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:24	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:25	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:25	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:25	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:26	N.jei	1	NS						found on analysis - unsure can't really hear it	
F001	22:26	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:28	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:29	P.pip	1	NS	F - Foraging					found on analysis	
F008	22:32	E.ser	1	NS	F - Foraging	Unk	Unk		22:32		
F001	22:32	E.ser	1	NS	F - Foraging					found on analysis - not 100% sure	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F001	22:34	E.ser	1	NS	F - Foraging					found on analysis - not 100% sure	
F001	22:34	P.pip	1	NS	F - Foraging					found on analysis	
F009	22:35	P.pip	1	NS	F - Foraging	Unk	Unk		22:35		
F010	22:35	E.ser	1	NS	Unknown	Unk	Unk		22:35		
F001	22:35	E.ser	1	NS						found on analysis - not 100% sure could be n.nei?	
F001	22:35	E.ser	1	NS						found on analysis - not 100% sure could be n.nei?	
F001	22:35	E.ser	1	NS						found on analysis - not 100% sure could be n.nei?	
F001	22:36	E.ser	1	NS						found on analysis - not 100% sure	
LP9	22:42-22:45	STOP		N/A	No Bats	N/A	N/A	N/A	22:42-22:45	LP9	
F001	22:45	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:45	P.pip	1	NS	F - Foraging					found on analysis	
F001	22:45	P.pip	1	NS	F - Foraging					found on analysis	
F011	22:48	P.pip	1	NS	F - Foraging	Unk	Unk		22:48	feeding buzz. Recorded along the road near LP9	
F012	22:49	P.pip	1	NS	F - Foraging	Unk	Unk		22:49	Recorded along the road	
F012	22:49	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:49	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:49	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:50	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:50	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:51	P.pip	1	NS	F - Foraging					found on analysis	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F012	22:51	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:51	P.pip	1	NS	F - Foraging					found on analysis & E.ser?	
F012	22:51	P.pip	1	NS	F - Foraging					found on analysis	
F013	22:52	E.ser	1	NS	F - Foraging	Unk	Unk		22:52	Recorded along the road - I think this relates to the sound file with the pip in it	
F014	22:52	P.pip	1	NS	F - Foraging	Unk	Unk		22:52	Recorded along the road	confirmed
F014	22:52	P.pip	1	NS	F - Foraging	Unk	Unk		22:52	Recorded along the road	confirmed
F012	22:52	P.pip	1	NS	F - Foraging					found on analysis	
F012	22:52	P.pip	1	NS	F - Foraging					found on analysis	
F014	22:53	P.pip	1	NS	F - Foraging	Unk	Unk		22:52	Recorded along the road	
F012	22:53	P.pip	1	NS	F - Foraging					found on analysis	
LP10	22:56-22:59	STOP		N/A	No Bats	N/A	N/A	N/A	22:56-22:59	LP10	
F015	23:09	P.pip	1	NS	F - Foraging	Unk	Unk		23:09		
F012	23:09	P.pip	1	NS	F - Foraging					found on analysis	
F012	23:12	P.pip	1	NS	F - Foraging					found on analysis	
F012	23:12	P.pip	1	NS	F - Foraging					found on analysis	
F012	23:13	P.pip	1	NS	F - Foraging					found on analysis	
F012	23:13	P.pip	1	NS	F - Foraging					found on analysis	
F016	23:14	P.pip	1	NS	F - Foraging	Unk	Unk		23:14		
F012	23:14	P.pip	1	NS	F - Foraging					found on analysis	
F012	23:14	P.pip	1	NS	F - Foraging					found on analysis	

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference	BAT TRANSECT 7				Surveyor(s)		AM & EC		Survey type	BA1: Bat - Activity (transect)	Date	13/09/2017
Survey Start (24 hours)	19:32	Survey End (24 hours)	22:32	Sunset	19:32	Sunrise		Detector / recording device type	Other					
Transect ID	F007	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS														
Air Temperature (°C)	13	Wind	1	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Rained heavily for 1st 15 mins - waited then started transect - weather then - cool, cloudy					
OBSERVATIONS - DETECTOR BATLOGGER - Birmingham Office - no D number sticker - BL-1519-2099 - full number														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	19:59	P.pip	1	NS	F - Foraging			83		93, and 94 near hedge. DETECTOR BATLOGGER - Birmingham Office - BL-1519-2099 - full number				
F002	20:01	P.pip	1	NS	F - Foraging			99						
F003	20:02	P.pip	1	NS	C - Commuting			107		At Waypoint 1.				
F004	20:08	P.pyg	2	S	F - Foraging	W	3	127		129, 138 - East to West				
F005	20:15	P.pip	1	NS	C - Commuting			156		At Waypoint 2.				
F006	20:21	P.pip	1	S	C - Commuting	E	3.5	168						
F007	20:43	P.pip	1	NS	C - Commuting			209						
F008	20:47	M.sp.	1	NS	C - Commuting			221		At Waypoint 4				
F009	20:50	P.pip	1	NS	C - Commuting			230		and 231				
F010	20:53	P.pyg	1	NS	C - Commuting			240						
F011	21:05	N.noc	1	NS	C - Commuting			291		potential noctule harmonic but unclear recording.				
F012	21:12	P.pip	1	NS	C - Commuting			321						
F013	21:16	Unknown	1	NS	C - Commuting			329		P.pip - P.aur? Very faint with 2 peaks seen on batlogger screen 36mhz and 44mhz				
F012	21:48	P.pyg	2	NS	F - Foraging			444		Feeding activity - regular				
F013	21:51	P.pip	1	NS	F - Foraging			458		regular feeding up and down lane				
F016	22:14	P.pyg	1	NS	C - Commuting			504						

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	Transect 7			Surveyor(s)	Chris Kemahan and James Sothcott		Survey type	BA1: Bat - Activity (transect)		Date	11/10/2017
Survey Start (24 hours)	18:28	Survey End (24 hours)	21:28	Sunset	18:28	Sunrise	N/A		Detector / recording device type	Elekon batlogger			
Transect ID	Transect 7	Transect start Eastings (X)	324165	Transect start Northings (Y)	122514		Transect end Eastings (X)	324165	Transect end Northings (Y)	122514			
WEATHER CONDITIONS													
Air Temperature (°C)	13	Wind	2	Cloud Cover	0	Rain	0	Weather Conditions (Description)	Cool, wind gusts to 2.				
h													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	18:39												
F002	18:36												
	18:57	N/A	1	N/A				18		Added from analysis	N.lei		
F003	18:57	P.pip	1	S	C - Commuting	S	4	19			P.pip		
F004	19:05	P.pip	1	S	C - Commuting	E	3	25			P.pip		
F005	19:14												
F006	19:25	P.pip	1	NS	Unknown	Unk	Unk	31, 34 & 35			P.pip		
	19:45	N/A	1	N/A				50		added from analysis	P.pip		
F007	19:30												
F008	19:46												
F009	19:50	P.pip	1	NS	Unknown	Unk	Unk	54			P.pip		
F010	20:01												
F011	20:22	P.pip	1	NS	F - Foraging	Unk	Unk	77-83			P.pip		
F012	20:29												
F013	20:39	P.pip	1	NS	Unknown	Unk	Unk	89-110		Likely same bat as F011, in same location., until 20:42			
F014	20:45												
F015	20:54	Unknown	1	NS	Unknown	Unk	Unk	112		Frequency 31 Hz. Very short call.	P.aur		
F016	20:59	P.pip	1	NS	F - Foraging	Unk	Unk	113-124			P.pip		

David Locke 28.11.17 Initial QA

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	Transect 8			Surveyor(s)	Christopher Kernahan and Adam Smith		Survey type	BA1: Bat - Activity (transect)		Date	24/04/2017
Survey Start (24 hours)	20:20	Survey End (24 hours)	22:27	Sunset	20:20	Sunrise		Detector / recording device type	Elekon batlogger Soton D5				
Transect ID	8	Transect start Eastings (X)	327931	Transect start Northings (Y)	123147		Transect end Eastings (X)	327612	Transect end Northings (Y)	123125			
WEATHER CONDITIONS													
Air Temperature (°C)	12	Wind	0	Cloud Cover	8	Rain	2	Weather Conditions (Description)	Light drizzle 1 hr into survey and continued until end.				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	20:26									Stop 1, no activity			
F002	20:33									Stop 2, no activity			
F003	20:40									Stop 3, no activity			
F004	20:49									Stop 4, no activity			
F005	20:57									Stop 5, no activity			
	21:05	P.pip								frequent pip	P.pip		
F006	21:06	P.pip	1	S	F - Foraging	Circular	Various	282		In field and along hedge.	P.pip		
F007	21:07	P.pip	1	S	F - Foraging	Circular	Various	296		Stop 6. Likely same bat as F006. Continues for 1 minute.	P.pip		
F008	21:11	P.pip	1	S	F - Foraging	Circular	Various	300		Same bat as F006 and F007.	P.pip		
	21:16	P.pip									P.pip		
F009	21:21	P.pyg	1	NS	C - Commuting			342			P.pyg		
F010	21:23	P.pip	1	NS	F - Foraging			350		At stop 7.			
F011	21:35									Stop 8, no activity.			
F012	21:54									Stop 9, no activity.			
F013	22:09									Stop 10, no activity.			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	22:10	P.pip									P.pip
F014	22:14	Unknown	1	NS				560		Unknown bat.	P.pyg
F015	22:16	P.pip	1	NS				580			
	22:17	P.pip								Continuous until 22:22	P.pip
										Are further surveys needed?	Yes

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	BAT TRANSECT 8			Surveyor(s)	AM + LN		Survey type	BA1: Bat - Activity (transect)		Date	18/05/2017
Survey Start (24 hours)	20:51	Survey End (24 hours)	22:48	Sunset	20:59	Sunrise			Detector / recording device type	Other			
Transect ID	F008	Transect start Eastings (X)	327931	Transect start Northings (Y)	123147		Transect end Eastings (X)	327612		Transect end Northings (Y)	123125		
WEATHER CONDITIONS													
Air Temperature (°C)	12	Wind	0	Cloud Cover	1	Rain	0	Weather Conditions (Description)	Cool and clear				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	20:55									STOP 1 - No Observations			
F002	21:06									STOP 2 - No Observations			
F003	21:12									STOP 3 - No Observations			
	21:17		1	NS	C - Commuting			108		Added.	E.ser		
	21:19		1	NS	C - Commuting			123		Added. Natterers or whiskered probably due to frequency but v.faint	M.sp.		
	21:21		1	NS	C - Commuting			129		Added.	P.pyg		
	21:23		1	NS	C - Commuting			139		Added. Also in 148 and 146/147 very faintly.	P.pip		
F004	21:24	N.noc	1	NS	C - Commuting			151		On greenway lane near nursery	N.noc		
	21:25		1	NS	C - Commuting			156		Added.	P.pip		
F005	21:26	N.noc	1	NS	C - Commuting			168		Non standard route to avoid cows see GPS and annotated map. 168-169	N.noc		
F006	21:31	P.pip	1	NS	F - Foraging			191		T191-197	P.pip		
F007	21:32	N.noc	1	NS	C - Commuting			202			N.noc		
F008	21:33	M.sp.	1	NS	F - Foraging			204		T204-217	P.pip		
F009	21:39	P.pip	1	NS	C - Commuting			243		T243-244	P.pip		
	21:40		1	NS	C - Commuting			252		Added. T252,256-257	P.pip		
	21:40		1	NS	C - Commuting			254		Added.T254.259	P.pyg		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F010	21:41	P.pip	1	S	E - Emergence			259		Near Stop 4. Not sure which track it was referring to so could be P.pip or P.pyg	P.pyg
F011	21:43	P.pyg	1	NS	F - Foraging			269		Stop 4. 2 bats a P.pip and P.pyg	P.pyg
F012	21:44	P.pip	2	NS	C - Commuting			270		STOP 4- Lots of P.Pip and P.Pyg activity. T270-279 no P.pyg. 281-292	P.pip
	21:45		1	NS	C - Commuting			280		Added. T293 also	M.dau
F013	21:45	P.pyg	2	NS	C - Commuting			281		STOP 4. T281,284,285,291	P.pyg
	21:46		1	NS	C - Commuting			288		Added.	Unknown
F012	21:55	P.pip	1	NS	C - Commuting			363		STOP 5	P.pip
F013	21:56	P.pip	1	NS	C - Commuting			367		STOP 5	P.pip
F016	22:03	P.pip	1	NS	C - Commuting			418			P.pyg
F017	22:04									STOP 6 - No Observations	
F018	22:08	P.pyg	1	NS	C - Commuting			439			P.pyg
F019	22:10	P.pip	1	NS	C - Commuting			450		Serotine?	P.aus
F020	22:14	E.ser	1	NS	C - Commuting			482		Stop 7	E.ser
F021	22:20	P.pip	1	NS	C - Commuting			510		T510-511	P.pip
F022	22:22	E.ser	1	NS	C - Commuting			525			E.ser
	22:26		1	NS	C - Commuting			550		Added.	P.pyg
F023	22:31									STOP 8 - No Observations	
F024	22:35									STOP 9 - No Observations	
F025	22:42									STOP 10 - No Observations (as modified)	
F026										Survey Finished	

BA1-BA4 BAT ACTIVITY SURVEY REVERSE DIRECTION as far as possible												
Ecology ID	Land Parcel Reference		BAT TRANSECT 8				Surveyor(s)	AM + JD	Survey type	BA1: Bat - Activity (transect)	Date	15/06/2017
Survey Start (24 hours)	21:25	Survey End (24 hours)	00:28	Sunset	21:28	Sunrise		Detector / recording device type		Other		
Transect ID	F008	Transect start Eastings (X)	326974	Transect start Northings (Y)		123911	Transect end Eastings (X)	326974	Transect end Northings (Y)		123911	
WEATHER CONDITIONS												
Air Temperature (°C)	14	Wind	2	Cloud Cover	1	Rain	0	Weather Conditions (Description)	Cool and clear			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001										<u>Batlogger Sotton 3</u> - reverse transect , as far as possible		
F002	21:32									Waypoint A (See map of this date)		
F003	21:50	E.ser	1	NS	C - Commuting			157		faint - Not seen on analysis	N/A	
F004	21:51									Waypoint 7		
F005	22:02									Waypoint 5		
F006	22:22									Waypoint 4		
F007	22:25	E.ser	1	NS	C - Commuting			267		at Waypoint 4, until 269	N.lei	
F008	22:27	P.pyg	1	S	F - Foraging		4	272 - 286		circling	P.pyg	
F009	22:30	P.pip	1	S	F - Foraging	NE	6m	300 - 304		until 22:32	P.pip	
	22:32	N/A	1	N/A				309		added from analysis	P.aur	
F010	22:34	P.pip	1	NS	F - Foraging			316			P.pip	
F011	22:34	E.ser	1	NS	C - Commuting			318			E.ser	
	22:36	N/A	2	N/A				322		Added from analysis - with E.ser	P.pip	
F012	22:36	E.ser	1	NS	F - Foraging			324 & 325		Waypoint B	N.lei	
F013	22:38	P.pip	1	S	F - Foraging	N	3m	326 & 327			P.pip	
F012	22:39	E.ser	1	S	F - Foraging	S	8m	328			E.ser	
F013	22:38	P.pyg	2	NS	C - Commuting			329		Also P.Pip x1	P.pyg	
	22:39	N/A	1	N/A				333		added from analysis	E.ser	
	22:41	N/A	1	N/A				348 - 375		added from analysis (constant activity until 22:45)	P.pip	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	22:45	N.noc	1	NS	C - Commuting			352		and P.pip x 1	N.noc
F017	22:44	E.ser	1	S	C - Commuting	E		362		Also P.pip x1	E.ser
F018		N.noc	1	NS	C - Commuting			373		time unknown see track number	N.noc
F019	22:47									Waypoint 10	
F020	22:48	N.noc	1	NS	C - Commuting			381		(at Waypoint 10)	N.noc
	22:50	N/A	1	N/A				384 - 386		added from analysis, very faint	E.ser
F021	22:51	N.noc	1	NS	C - Commuting			387 & 288			N.noc
F022	22:51	P.pip	2	NS	C - Commuting			389		With P.aur	E.ser
	22:53	N/A	1	N/A				392 - 396		added from analysis	P.pip
F023	22:59	E.ser	1	NS	F - Foraging			422			E.ser
F024	22:59									Waypoint 3 - as moved due to livestock (see map)	
F025	22:04	P.pip	1	NS	C - Commuting			438			P.pip
F026	23:08	N.noc	1	NS	C - Commuting			454 & 455		Arriving at Waypoint 8 - faint	N.lei
F027	23:22	P.pip	1	NS	C - Commuting			501		Arriving at Waypoint C	P.pip
F028	23:24	E.ser	1	NS	C - Commuting			507		at Waypoint C	B.bar
F029	23:26	P.pip	1	NS	C - Commuting			515			P.pip
F030	23:28	P.pip	1	S	F - Foraging		1m	523 & 529		circling	P.pip
F031	23:34									Waypoint D	
F032	23:34	P.pip	1	NS	C - Commuting			597 & 598		Arriving Waypoint D	P.pip
	23:37	N/A	1	N/A				605 & 606		Added from analysis	P.pyg
F033	23:38	E.ser	1	NS	F - Foraging			619		Nothing on analysis	N/A
F034		P.pyg	2	NS	F - Foraging			637		Both P.pips	P.pip
	23:43	P.pip	1	N/A				639 & 654		added from analysis (until 23:44)	P.pip

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F035	00:00	N.noc	1	NS	C - Commuting			744 - 783		Near Waypoint 5	N.sp/E.ser
F037	00:06	N.noc	1	NS	C - Commuting			797			N.lei
	00:07	N/A	1	N/A				811		added from analysis	N.lei
	00:15	N/A	1	N/A				901		added from analysis, faint	P.pip
F038	00:16	E.ser	1	NS	C - Commuting			915		Not seen on analysis	N/A
F039	00:26	P.pyg	1	NS	C - Commuting			1026, 1033 - 1040			P.pip
F040	00:28									END OF SURVEY	
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID	Bat Transect 8		Land Parcel Reference	ST304833			Surveyor(s)	JS + JC		Survey type	BA1: Bat - Activity (transect)		Date	18/05/2017
Survey Start (24 hours)	03:19		Survey End (24 hours)	05:16	Sunset		Sunrise	05:19		Detector / recording device type	Elekon batlogger			
Transect ID	F008	Transect start Eastings (X)	327612		Transect start Northings (Y)	123147		Transect end Eastings (X)	327612		Transect end Northings (Y)	123147		
WEATHER CONDITIONS														
Air Temperature (°C)	13		Wind	2	Cloud Cover	4		Rain	2		Weather Conditions (Description)	Overcast with light rain, clearing as survey continued.		
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	03:23	P.pip	1	NS	F - Foraging	Unk		11						
F002	03:25	P.pip	1	NS	F - Foraging	Unk		17		Repeated hits on detector for 2-3 mins.				
F003	03:36	P.pip	1	NS	C - Commuting	Unk		42						
F004	03:43	P.pyg	1	NS	C - Commuting	Unk		66						
F005	04:12	P.pip	1	NS	Unknown	Unk		143						
F006	04:12	N.noc	1	NS	Unknown	Unk		143						
F007	04:16	P.pip	1	NS	Unknown	Unk		151						
F008	04:25	P.pyg	1	NS	Unknown	Unk		163						
F009	04:32	P.pyg	1	NS	Unknown	Unk		167		Very faint.				
F010	04:37	P.pip	1	S	C - Commuting	E	3	174		Identified heading east along hedgerow.				
F011	04:40	P.pip	1	S	F - Foraging	E	3	183		Circling and feeding in corner of field between stops 8 & 9.				
F012	04:58	P.pip	1	S	F - Foraging	E	3	242		Circling and feeding in corner of field between stops 9 & 10 (same corner as F011, anticipated to be the same bat).				
F013	05:02	N.noc	1	NS	C - Commuting	Unk		275		Recorded at stop point 10.				
										Are further surveys needed?				

D1

BA1-BA4 BAT ACTIVITY SURVEY																	
Ecology ID		Bat Transect 8		Land Parcel Reference		ST304833		Surveyor(s)		JS + JC		Survey type	BA1: Bat - Activity (transect)	Date	19/07/2017		
Survey Start (24 hours)		21:19		Survey End (24 hours)		23:57		Sunset		21:19		Sunrise		Detector / recording device type		Elekon batlogger	
Transect ID	F008	Transect start Eastings (X)		327612		Transect start Northings (Y)		123147		Transect end Eastings (X)		327612		Transect end Northings (Y)		123147	
WEATHER CONDITIONS																	
Air Temperature (°C)		20		Wind		1		Cloud Cover		8		Rain		3		Weather Conditions (Description)	Overcast with light rain progressing to heavy rain as the survey continued.
OBSERVATIONS																	
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes			Sound analysis result				
F001	21:31:00	P.pip	1	NS	C - Commuting	Unknown		26		Very faint, located between transect stops 2 & 3.							
F002	21:37:00	P.pip	1	S	F - Foraging	N	3	30		Circling stopping point 3, south to north. Repeated hits on detector for the duration of the stop.							
F003	21:44:00	P.pip	2	S	F - Foraging	N	3	72 - 74		Circling corner of field between stops 3 & 4.							
F004	21:51:00	P.pip	2	S	F - Foraging	NE	2	85		Feeding along field edge / linear belt of trees. Repeated hits on detector for 4-5 mins.							
F005	22:07:00	P.pip	1	S	F - Foraging	N	5	140		Feeding along hedgerow, circling north to south.							
F006	22:10:00	N.noc	1	NS	C - Commuting	Unknown		150		Detected at stop point 5.							
F007	22:11:00	P.pip	1	NS	F - Foraging	Unknown		150		Detected at stop point 5. Repeated hits on the detector for the duration of the stop.							
F008	22:18:00	P.pip	1	NS	Unknown	Unknown		175									
F009	22:24:00	P.pip	1	NS	Unknown	Unknown		193									
F010	22:37:00	N.noc	1	NS	Unknown	Unknown		217		Very faint.							
F011	22:40:00	N.noc	1	NS	Unknown	Unknown		227		Very faint.							
F012	22:45:00	N.noc	1	NS	Unknown	Unknown		243 & 256		Detected at stop point 7.							
F013	22:53:00	N.sp/E.ser	1	NS	Unknown	Unknown		260		Recorded on frequency - 26/27 kHz.							
F014	22:58:00	P.pip	1	NS	Unknown	Unknown		279									
F015	23:10:00	P.pyg	2	NS	Unknown	Unknown		327									
F016	23:19:00	P.pip	1	S	F - Foraging	N	5	359		Circling corner of field between stop points 9 & 10.							

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F017	23:28:00	P.pip	1	NS	Unknown	Unknown		386		Detected at stop point 8.	
F018	23:34:00	P.pip	1	NS	Unknown	Unknown		408			
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID	T8		Land Parcel Reference	multiple			Surveyor(s)	Tess JD		Survey type	BA1: Bat - Activity (transect)		Date	10/08/2017	
Survey Start (24 hours)	20:43		Survey End (24 hours)	23:43		Sunset	20:43		Sunrise	Detector / recording device type			Anabat walkabout		
Transect ID	F008		Transect start Eastings (X)	327521		Transect start Northings (Y)	123731		Transect end Eastings (X)	327521		Transect end Northings (Y)	123731		
WEATHER CONDITIONS															
Air Temperature (°C)	16		Wind	1		Cloud Cover	1		Rain	0		Weather Conditions (Description)	Dry, calm. Cool. Temperature was 11 degrees C at the end.		
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result				
	?	P.pip	1	NS					20:53	added on analysis	Amended				
	?	P.pyg	1	NS					20:57	added on analysis	Amended				
LP1	21:00-21:03	STOP		N/A	No bats	N/A	N/A	N/A	21:00-21:03						
	?	Pip sp.	1	NS					21:03	added on analysis	Amended				
	?	Pip sp.	1	NS					21:07	added on analysis	Amended				
LP2	21:09-21:11	STOP		N/A	No bats	N/A	N/A	N/A	21:09-21:11						
LP3	21:17-21:20	STOP		N/A	No bats	N/A	N/A	N/A	21:17-21:20						
F001	21:21	Unknown	1	S	F - Foraging	S	4		21:13	Bat may not have been picked up on bat detector due to distance. Seen Foraging along hedgerow. Bat detector time is wrong, stating 21:13 (not seen on analysis)	Amended				
	21:24	P.pip	1	NS					21:24	added on analysis	Amended				
LP4	21:30-21:33	STOP		N/A	No bats	N/A	N/A	N/A	21:30-21:33						
F002	21:39	P.pip	1	NS	C - Commuting	Unk	N/A	N/A	21:39		Confirmed				
	21:40	P.pyg	1	NS					21:40	added on analysis	Amended				
LP5	21:43-21:46	STOP		N/A	No bats	N/A	N/A	N/A	21:43-21:46						
LP6	21:58-22:01	STOP		N/A	No bats	N/A	N/A	N/A	21:58-22:01						
	22:03	P.pip	1	NS					22:03	added on analysis	Amended				
LP7	22:09-22:12	STOP		N/A	No bats	N/A	N/A	N/A	22:09-22:12						
LP8	22:21-22:24	STOP		N/A	No bats	N/A	N/A	N/A	22:21-22:24						
	22:28	P.pyg	1	NS					22:28	added on analysis	Amended				
F003	22:30	P.pip	1	NS	F - Foraging	Unk	N/A	N/A	22:30		Confirmed				

AW2

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID	T8		Land Parcel Reference	Multiple			Surveyor(s)	LB, KM		Survey type	BA1: Bat - Activity (transect)		Date	13/09/2017	
Survey Start (24 hours)	19:31		Survey End (24 hours)	22:31		Sunset	19:31		Sunrise	06:45		Detector / recording device type	Elektron batlogger		
Transect ID	F008		Transect start Eastings (X)	327521		Transect start Northings (Y)	123731		Transect end Eastings (X)	327521		Transect end Northings (Y)	123731		
WEATHER CONDITIONS															
Air Temperature (°C)	11		Wind	5		Cloud Cover	7		Rain	2		Weather Conditions (Description)	At start, rain was very heavy but this became lighter within 20 minutes and then stopped within 35 minutes.		
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result				
F001	20:05	N.sp.	2	S	S - Socialising	E	7	33-35		om west to east but then to the north, flying around each other. At point a on map. (amended from 20:06 n.lei, big bat social calling but unclear	Amended				
F002	20:06	P.pip	1	NS	Unknown	N/A	N/A	36		At point a on map.	Confirmed				
F003	20:07	N.noc	1	NS	Unknown	N/A	N/A	38, 39		At point a on map. (amended from big bat)	Amended				
	20:07	P.pip	1	NS	Unknown	N/A	N/A	40		Found on analysis	Amended				
F004	20:09-20:10	P.pip	1	S	C - Commuting	S	5	43-46		At point a on map. A few passes.	Confirmed				
F005	20:10	P.pyg	1	S	C - Commuting	SE	5	47		Near to point a on map.	Confirmed				
F006	20:11	P.pip	1	NS	F - Foraging	N/A	N/A	48, 49		Near to point a on map. Multiple passes.	Confirmed				
	20:12	B.bar	1	NS	Unknown	N/A	N/A	50		Found on analysis	Amended				
F007	20:12	P.pyg	1	S	F - Foraging	W	6	52/53		Near to point a on map. Foraged around surveyors. Multiple passes. Also commuting towards the west.	Confirmed				
	20:13	P.pyg & P.pip	2		C - Commuting			54		found on analysis	Amended				
F008	20:13	P.pip	1	S	F - Foraging	W	8	55		Near to point a on map. Flew around each other. (amended from track 55/56 2 bats. One on each track.)	Amended				
F008	20:13	P.pyg	1	S	F - Foraging	W	8	56		Near to point a on map. Flew around each other. (amended from track 55/56 2 bats. One on each track.)	Amended				
	20:15	P.pip	1					58		found on analysis	Amended				
	20:15	P.pyg & P.pip	2		S - Socialising			59-60		found on analysis	Amended				
	20:15	P.pyg	1		S - Socialising			61		found on analysis	Amended				
	20:15	E.ser	1		S - Socialising			62		found on analysis	Amended				
F009	20:16	P.pyg	2	S	F - Foraging	S	7	63 - 66		Further east of point a on map. Flew around each other and passed up and down hedgerow. (amended from pip sp.)	Amended				
	20:16	P.pip	1		F - Foraging			67		found on analysis	Amended				

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID	Transect 8		Land Parcel Reference	Multiple			Surveyor(s)	GG, RH		Survey type	BA1: Bat - Activity (transect)		Date	12/10/2017	
Survey Start (24 hours)	18:25		Survey End (24 hours)	21:25		Sunset	18:25		Sunrise	Detector / recording device type			Anabat walkabout		
Transect ID	F008		Transect start Eastings (X)	327521		Transect start Northings (Y)	123731		Transect end Eastings (X)	327521		Transect end Northings (Y)	123731		
WEATHER CONDITIONS															
Air Temperature (°C)	14		Wind	0		Cloud Cover	1		Rain	0		Weather Conditions (Description)	Warm clear evening		
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result				
F001	18:34									Stopping point 1					
F002	18:40									Stopping point 2					
F003	18:46									Stopping point 3					
F004	18:52									Stopping point 4					
F005	19:00	P.pip	1	S	C - Commuting	E									
F006	19:01									stopping point 5					
F007	19:14									Stopping point 6					
F008	19:23									Stopping point 7					
F009	19:26	P.pip	1	NS	F - Foraging										
F010	19:27	P.pip	1	S		S				assumed to be the pip heard previously					
F011	19:32	P.pyg	1	NS											
F012	19:34									Stopping point 8					
F013	19:39	P.pip	1	NS											
F014	19:45									Stopping point 9					
F015	19:47	P.pip	1	NS											
F016	19:55	N.sp/E.ser													
F017	19:56	P.pip	1							Socialising					
F018	19:57	N.sp/E.ser	1							Serotine/leislars?					
F019	20:02	P.pip	1							frequent passes until 20:02					

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F020	20:02	E.ser									
F021	20:03	P.pyg	1	NS							
F022	20:04									Stopping point 1	
F023	20:04	Pip.sp.	2							Common and Soprano	
F024	20:10	E.ser									
F025	20:11	P.pip			F - Foraging					Stopping point 2 20:11	
F026	20:15	P.pip		NS	F - Foraging						
F027	20:18	N.noc									
F028	20:25	M.sp.								Stopping point 3 20:21	
F029	20:33	E.ser								stopping point 4 20:29	
F030	20:39	P.pip								Stopping point 5 20:37	
F031	20:44	P.pip									
F032	20:51	P.pip									
F033	20:54									Stopping point 6	
F034	21:01	P.pip									
F035	21:03									stopping point 7	
F036	21:11									stopping point 8	
F037	21:15									DETECTOR DIED	
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference	Transect 9			Surveyor(s)	Unknown	Survey type	BA1: Bat - Activity (transect)		Date	25/04/2017
Survey Start (24 hours)	20:12	Survey End (24 hours)	23:17	Sunset		Sunrise		Detector / recording device type	Batlogger			
Transect ID	9	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)				
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001										Original proforma deleted so all info is from sound analysis		
F002	21:38	Unknown	1					121		Possible bat call?	New Record	
F003	22:44	M.sp.	1					219			New Record	
								Are further surveys needed?	Yes			

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	Transect 9			Surveyor(s)	D. Byett + T. Jones		Survey type	BA1: Bat - Activity (transect)		Date	22/05/2017
Survey Start (24 hours)	21:07	Survey End (24 hours)	22:30	Sunset	21:07	Sunrise		Detector / recording device type	AW5 walkabout				
Transect ID	9	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
WEATHER CONDITIONS													
Air Temperature (°C)	15	Wind	1	Cloud Cover	2	Rain	0	Weather Conditions (Description)	slightly humid, clear				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:23	N.noc	1	S	F - Foraging					foraging above field			
F002	21:31	N.noc	1	NS									
F003	21:36	P.pip	1	NS									
F004	21:42	P.pip	1	NS									
F005	21:44	Pip sp.	1	S						heard at same time			
F006	21:45	P.pip	1	S	F - Foraging					foraging up and down hedge line			
F007	21:51	P.pip	1	NS									
F008	21:53	P.pip	1	NS									
F009	21:57	P.pip	1	S	F - Foraging								
F010	21:58	Pip sp.	1	NS									
F011	22:00	P.pip	1	NS	S - Socialising					socialising			
F012	22:10	P.pip	1	NS									
F013	22:31	P.pip	1	NS									
F014	22:46	P.pip	1	NS									
F015	22:55	P.pip	1	NS									

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	23:12	P.pip	1	NS							
										Are further surveys needed?	Yes

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID	Transect 9		Land Parcel Reference	A358 - BAT TRANSECT 9			Surveyor(s)	AM (recording), DB (w detector)		Survey type	BA1: Bat - Activity (transect)		Date	19/06/2017
Survey Start (24 hours)	21:30	Survey End (24 hours)	00:30	Sunset	21:30	Sunrise			Detector / recording device type	Batlogger Southampton AW1 (anabat walkabout)				
Transect ID	9	Transect start Eastings (X)	329119	Transect start Northings (Y)		119609	Transect end Eastings (X)		329119	Transect end Northings (Y)		119609		
WEATHER CONDITIONS														
Air Temperature (°C)	24	Wind	1	Cloud Cover	2	Rain	0	Weather Conditions (Description)		very warm and muggy.				
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001										REVERSE ORDER ROUTE				
F002	21:30									Waypoint 10				
F003	21:47									Waypoint 9				
F004	22:03	noctule	1	S	C		12m			Near Waypoint 8 - circling	Noctule			
F005	22:06									Waypoint 8				
F006	22:16									Waypoint 7				
F007	22:29	P45	1	S	F	N	6m				P.pip			
F008	22:30	P45	1	NS	C									
F009	22:31	P45	1	S	C						P.pip			
F010	22:33									Waypoint 6				
F011	22:36	P45	1	S	F	W					P.pip			
F012	22:43	P45	1	NS	C						P.pip			
F013	22:44									Waypoint 5				
F014	22:47	P45	1	NS	F						Noctule			
F015	22:56									Waypoint 4				

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	23:05										Poss Leis
F016	23:07									Waypoint 3	
F017	23:11	P45	1	NS	F						P.pip
F018	23:14	Leislars?	1	NS	C						Poss Leis
F019	23:16	P45	1	NS	F						P.pip
F020	23:17	P45	1	NS	C						P.pip
	23:18									Faint. Found during analysis	Barb
F021	23:21	P45	1	NS	F						P.pip
F022	23:23	P45	1	NS	F						P.pip
F023	23:25									Waypoint 2	
F024	23:25	Leislars?								at Waypoint 2	Leisler's
F025	23:29	Leislars?	1	NS	F					to 23:30	Leisler's
F026	23:31	P45	1	NS	F					Not recorded	Unknown
	23:42									Found during analysis	P.pip
	23:44									Found during analysis	P.pip
	23:46									Found during analysis	P.pip
	23:46									Found during analysis	Leisler's
	23:49									Found during analysis	Leisler's
	23:50									Found during analysis	P.pyg

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	Transect 9			Surveyor(s)	D. Byett + AS		Survey type	BA1: Bat - Activity (transect)		Date	25/07/2017
Survey Start (24 hours)	21:10	Survey End (24 hours)	02:24	Sunset		Sunrise	21:10	Detector / recording device type	AW5 walkabout				
Transect ID	9	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
WEATHER CONDITIONS													
Air Temperature (°C)	13	Wind	0	Cloud Cover		Rain	0	Weather Conditions (Description)					
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:10												
F002	21:20												
F003	21:38												
F004	21:45												
F005	21:50	P.pyg	1	S	F - Foraging					up and down track, under trees head height			
F006	21:53	P.pip	1	S	F - Foraging					As above			
F007	21:56	P.aur	1	NS	F - Foraging					1 pulse			
F008	21:57												
F010	21:58	P.pip	1	NS	F - Foraging					P5 1 poss reutmed @22:00			
F011	22:02	P.pip	1	NS	F - Foraging								
F012	22:07	pip sp.	1	S	F - Foraging					fluying down road / hedges			
F013	22:00	p.aur	1	S	F - Foraging					query			
F014	22:11	p.pip	1	NS	F - Foraging					multiple passes			
F015	22:23	P.aur	1	NS	F - Foraging					constant and consistent			
F016	22:25	p.pyg	1	NS	F - Foraging					1 pass			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F017	22:28	p.pip	1	NS	F - Foraging					1 pass	
F018	22:50	p.pip	1	NS	F - Foraging					1 pass	
F019	22:52	Serotine	1	NS	F - Foraging					query	
F020	23:31	p.pip	1	NS	F - Foraging					multiple passes	
F021	23:35	p.pip	1	NS	F - Foraging					2 pulses up and down path	
F022	23:57	p.pip	1	NS	F - Foraging					Distant	
F023	00:00	p.pip	1	NS	F - Foraging						
F024	00:02	LHS	1	S	F - Foraging					followed underside of bridge. Foraging around area	
										Are further surveys needed?	Yes

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID		Transect 9		Land Parcel Reference			Surveyor(s)		Adam Smith and Tess Jones		Survey type		BA1: Bat - Activity (transect)	Date	30/08/2017
Survey Start (24 hours)		20:03		Survey End (24 hours)		23:03	Sunset	20:03		Sunrise		Detector / recording device type		Anabat walkabout	
Transect ID	F009	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS															
Air Temperature (°C)		15		Wind		1	Cloud Cover	2		Rain	0	Weather Conditions (Description)		still and mild	
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result			
	20:16	P.pip	1	NS							added from analysis	Amended			
F001	20:20-20:22	P.pyg	1	S	F - Foraging				Point count 3		Foraging along hedgerows (amended from 20:23)	Amended			
F002	20:32	P.pip	1	NS							amended from 20:33	Amended			
	20:34	P.pip	1	NS	S - Socialising						added from analysis	Amended			
	20:35	M.sp.	1	NS							added from analysis	Amended			
	20:35	P.pip	1	NS							added from analysis	Amended			
F003	20:36-20:37	P.pyg	1	S	F - Foraging		2				amended from 20:37	Amended			
F004	20:37-20:39	P.pip	1	S	F - Foraging		2				amended from 20:39	Amended			
F005	20:40-20:41	P.pip	1	S	F - Foraging		2				amended from 20:42	Amended			
F006	20:40-20:42	P.pyg	1	S	F - Foraging						amended from 20:42	Amended			
	20:46	P.pip	2	NS	F - Foraging						added from analysis	Amended			
	20:46-20:47	P.pip	1	NS	F - Foraging						added from analysis	Amended			
F007	20:48-20:49	P.pip	1	S	F - Foraging				Point count 4		Foraging along hedgerows (amended from 20:50)	Amended			
	20:50	N.sp/E.ser	1	NS							added from analysis	Amended			
	20:52-20:55	P.pyg	1	NS							added from analysis	Amended			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	20:53-20:54	P.pip	1	NS						added from analysis	Amended
F008	20:56	P.pyg	1	NS					Point count 5	amended from 20:57	Amended
	20:59-21:00	P.pyg	1	NS						added from analysis	Amended
F009	21:00	M.sp.	1	NS					Point count 5	amended from 21:02	Amended
F010	21:03-21:09	P.pip	1	S	F - Foraging					amended from 21:05	Amended
	21:22	P.pip	1	NS						added from analysis	Amended
F011	21:29	P.pip	1	NS					Point count 6	amended from 21:30	Amended
F012	21:39	P.pip	1	NS					Point count 6	amended from 21:40	Amended
F013	21:40	M.sp.	1	NS					Point count 6	amended from 21:41	Amended
	22:15	B.bar	1	NS						added from analysis	Amended
F014	22:39	P.pyg	1	NS					Point count 10	amended from 22:40	Amended
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference	Transect 9			Surveyor(s)		JPS and JD		Survey type	BA1: Bat - Activity (transect)	Date	19/09/2017			
Survey Start (24 hours)	19:17	Survey End (24 hours)	22:17	Sunset	19:17	Sunrise		Detector / recording device type and number	Anabat walkabout							
Transect ID	F009	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)								
WEATHER CONDITIONS																
Air Temperature (°C)	15	Wind	0	Cloud Cover	8	Rain	0	Weather Conditions (Description)	Overcast, calm, humid							
OBSERVATIONS																
Point Counts	1	Start: 19:25 Finish: 19:28	2	Start: 19:39 Finish: 19:42	3	Start: 19:49 Finish: 19:52	4	Start: 20:15 Finish: 20:18	5	Start: 20:32 Finish: 20:35	6	Start: 20:49 Finish: 20:52	7	Start: 20:03 Finish: 20:06	8	Start: 21:11 Finish: 21:14
	9	Start: 21:24 Finish: 21:27	10	Start: 21:46 Finish: 21:49												
Observation no. (align with map)	Time (24 hours)	Betw	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result				
F001	19:18	P.pyg	1	NS							Added on analysis	Amended				
F001	19:20-19:21	P.pyg	1	NS						East of 1	amended from 19:21	Amended				
	19:25	P.pyg	1	NS							Added on analysis	Amended				
	19:26-19:28	P.pyg	1	NS	S - Socialising						Added on analysis	Amended				
F002	19:29	P.pip	1	NS	F - Foraging					West of 1		Confirmed				
F003	19:29	P.pyg	1	S	F - Foraging	E	3			West of 1	Foraging along road	Confirmed				
F004	19:35	P.pip	1	NS	Unknown					east of 2	Faint, brief (amended from p.pyg)	Amended				
	20:04	M.sp.	1	NS	F - Foraging					Between 3 and 4	Added on analysis	Amended				
F005	20:05	P.pip	1	NS	F - Foraging					Between 3 and 4	amended from 20:04	Amended				
	20:08	Unknown	1	NS							Added on analysis - possible barb??	Amended				
	20:09	Unknown	1	NS							Added on analysis - possible barb??	Amended				
	20:10	N.sp/E.ser	1	NS							Added on analysis	Amended				
	20:13	B.bar	1	NS							Added on analysis	Amended				
F006	20:16	P.pyg	1	NS	S - Socialising					4	Foraging social calls, 2 passes	Confirmed				

Observation no. (align with map)	Time (24 hours)	Betw	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result
	20:18	B.bar & P.pyg	1	NS							Added on analysis	Amended
F007	20:18	P.pip	1	NS	S - Socialising					4		Confirmed
	20:18-20:21	P.pyg	1	NS	S - Socialising						Added on analysis	Amended
F008	20:21	P.pyg	1	NS	S - Socialising					Between 4 and 5		Confirmed
F009	20:25-20:27	P.pip	1	NS	C - Commuting					Between 4 and 6	amended from 20:25	Amended
F010	20:27-20:29	P.pyg	1	NS	S - Socialising					west of 5	Social calls (amended from 20:29)	Amended
F011	20:30-20:34	P.pip	1	NS	C - Commuting					5	amended from 20:34	Amended
F012	20:36-20:38	P.pip	1	NS	F - Foraging					SE of 5	amended from 20:37	Amended
	20:39	N.sp/E.ser	1	NS							Added on analysis	Amended
	20:41	N.sp/E.ser	1	NS							Added on analysis	Amended
F013	20:42-20:43	P.pip	1	NS	F - Foraging					Bickenhall Lane	Foraging and also including social calls (amended from 20:42)	Amended
F014	20:44-20:47	P.pip	3	S	C - Commuting	W	4			Bickenhall Lane	Foraging/commuting over lane. Three bats in a row pass over. (amended from 20:44)	Amended
F015	20:49	P.pip	1	NS	F - Foraging					6	(No bats at this time)	Amended
F016	20:52-20:54	M.sp.	1	NS							Part of feeding loop (amended from 20:52 p.pip)	Amended
	20:57	P.pyg	1	NS							Added on analysis	Amended
F017	20:57	P.pip	1	S	C - Commuting	E	2			Near 10	Quiet calls (no tail), open area with little clutter along road (amended from 20:58)	Amended
	20:58	M.sp.	1	NS							Added on analysis	Amended
	21:03	P.pip	1	NS							Added on analysis	Amended
	21:31	P.pip	1	NS							Added on analysis	Amended

Observation no. (align with map)	Time (24 hours)	Betw	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result
	21:31	N.sp/E.ser	1	NS							Added on analysis	Amended
	21:36	P.pip	1	NS							Added on analysis	Amended
F018	21:38	P.pip	1	NS	C - Commuting					Between 9 and 10		Confirmed
F019	21:39-21:41	P.pip	1	NS	C - Commuting					Between 9 and 10	amended from 21:42	Amended
	21:45	P.pip	1	NS							Added on analysis	Amended
	21:46	M.sp.	1	NS							Added on analysis	Amended
F020	21:46	P.pip	1	NS	F - Foraging					10	Part of feeding loop	Confirmed
	21:47	M.sp.	1	NS							Added on analysis	Amended
	21:48	P.pip	1	NS	S - Socialising						Added on analysis	Amended
	21:48	P.pip & P.pyg	2	NS	S - Socialising						Added on analysis	Amended
	21:48-21:49	Pip sp.	1	NS	S - Socialising						Added on analysis	Amended
	21:49-21:50	P.pyg	1	NS	S - Socialising						Added on analysis	Amended
	21:51	P.pip	1	NS							Added on analysis	Amended
F021	21:55-21:56	P.pip	1	NS	F - Foraging					Between 5 and 10 Bickenhall lane	amended from 21:55	Amended
F022	21:57	P.pip	1	NS	S - Socialising					Between 5 and 10 Bickenhall lane		Confirmed
	21:59-22:00	P.pip	1	NS							Added on analysis	Amended
F023	22:01-22:02	P.pip	1	NS	Unknown					Between 5 and 10 Bickenhall lane		Amended
	22:04	P.pip	1	NS							Added on analysis	Amended
F024	22:06	P.pip	1	NS	Unknown					Between 5 and 10 Bickenhall lane	amended from 22:07	Amended

Observation no. (align with map)	Time (24 hours)	Betw	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result
											Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference		multiple		Surveyor(s)		RW CD		Survey type		Date
18:01		21:01		Sunset		18:01		Sunrise		Detector / recording device type		24/10/2017
Survey Start (24 hours)		Survey End (24 hours)								BatLogger (Cams 2)		
Transect ID	9	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)		18		Wind		4		Cloud Cover		5		Rain
										0		Weather Conditions (Description)
												windy and mild
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001	18:08									Point count 1		
F002	18:21									Point count 2		
F003	18:25	P.pip	1	NS				107		amended from 21:26	Amended	
	18:27	P.pip	1	NS				113		found on analysis	Amended	
	18:27	N.sp.	1	NS				115		found on analysis	Amended	
F004	18:32	N.lei	1	S		S	10	129		Not picked up on detector. Flying along tree line close to footpath (v faint leisler at 18:31:58 - possibly this or myotis, see below)	Amended	
	18:32	M.sp.	1					132		found on analysis	Amended	
F005	18:35									Point count 3		
F006	18:41	P.pyg	1	NS	F - Foraging			151, 152			Confirmed	
	18:48	Pip sp.	1	NS	S - Socialising			163		Found on analysis - Single pip social call	Amended	
	18:48	P.pyg	1	NS	S - Socialising			164			Confirmed	
F007	18:48-18:49	P.pyg	1	NS	S - Socialising			164-171		amended from foraging tr 169	Amended	
	18:50	P.pyg	1	NS	S - Socialising			172-177		found on analysis	Amended	
	18:51	P.pyg	1	NS	S - Socialising			181-182		found on analysis	Amended	
	18:52	B.bar	1	NS				184		found on analysis	Amended	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	18:54	P.pyg	1	NS	S - Socialising			188-189		found on analysis	Amended
	19:10	N.noc	1	NS				242		found on analysis	Amended
F008	19:22	N.noc	1	NS				289		Turned back at this point as could not get through woodland (missed point counts 4 & 5). (amended from 288)	Amended
	19:22	B.bar	1	NS				290		found on analysis	Amended
F009	19:23	P.pyg	1	NS	S - Socialising			292-296		amended from tr 296	Amended
	19:24	N.sp/E.ser	1	NS				299		found on analysis	Amended
	19:27	N.sp/E.ser	1	NS				300-302		found on analysis	Amended
F010	19:28	P.pyg	1	NS				304		Batlogger stopped working so had to be restarted. (amended from 19:27 tracks from this point all amended)	Amended
	19:28-19:29	E.ser	1	NS				305-308		found on analysis	Amended
	19:29	P.pyg	1	NS				309-314		found on analysis	Amended
	19:30	P.pyg & E. ser	2	NS				315		found on analysis	Amended
	19:30	P.pyg	1	NS	S - Socialising			317		found on analysis	Amended
	19:30	P.pyg & E. ser	2	NS				318		found on analysis	Amended
	19:31	B.bar	1	NS				319		found on analysis - possible barb but very unclear	Amended
F011	19:38-19:40	P.pip	1	NS	S - Socialising			344-356, 360, 362-363		tracks added	Amended
F012	20:04									Point count 6	
F013	20:11									Point count 7	
F014	20:21-20:23	P.pyg	1	NS				445, 447-455		Point count 8	Confirmed
	20:24	P.pyg	1	NS				458-459, 463		found on analysis	Amended

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
	20:25	P.pyg	1	NS				467-469		found on analysis	Amended
F015	20:36									Point count 9	
F016	20:41	P.pip	1	NS	F - Foraging			539-541, 544		Foraging up and down hedgerow (amended from pip sp)	Amended
	20:43	P.pip	1	NS				548, 549		found on analysis	Amended
	20:44-20:45	P.pip	1	NS				555, 558-563		found on analysis	Amended
F017	20:55									Point count 10	
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference		Transect 10			Surveyor(s)	Christopher Kernahan and Adam Smith		Survey type	BA1: Bat - Activity (transect)		Date	25/04/2017
Survey Start (24 hours)	20:25	Survey End (24 hours)	22:25	Sunset	20:25	Sunrise		Detector / recording device type	Elekon batlogger Soton D5					
Transect ID	10	Transect start Eastings (X)	330592	Transect start Northings (Y)			118790	Transect end Eastings (X)		330464	Transect end Northings (Y)		118771	
WEATHER CONDITIONS														
Air Temperature (°C)	5	Wind	0	Cloud Cover	1	Rain	0	Weather Conditions (Description)	Very cold, light rain by end. Stayed at 5 degrees for whole survey.					
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	20:30									At stop 1, no activity.				
F002	20:36									At stop 2, no activity.				
F003	20:55									At stop 3, no activity.				
F004	21:05									At stop 4, no activity.				
F005	21:16									At stop 5, no activity.				
F006	21:25									At stop 6, no activity.				
F007	21:37									At stop 7, no activity.				
F008	21:54									At stop 8, no activity.				
F009	22:05									At stop 9, no activity.				
F010	22:13									At stop 10, no activity.				
										Are further surveys needed?	Yes			

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference	Transect 10				Surveyor(s)	D. Byett + T. Jones		Survey type	BA1: Bat - Activity (transect)		Date	23/05/2017
Survey Start (24 hours)	21:07	Survey End (24 hours)	23:15	Sunset	21:08	Sunrise		Detector / recording device type	AW5 Walkabout					
Transect ID	10	Transect start Eastings (X)	330592	Transect start Northings (Y)	118790	Transect end Eastings (X)	330464	Transect end Northings (Y)	118771					
WEATHER CONDITIONS														
Air Temperature (°C)	15	Wind	2	Cloud Cover	8	Rain	1	Weather Conditions (Description)	fine mist/ drizzle					
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	21:29	N.noc	1	NS							N.noc			
F002	21:46	P.pip	1	S	F - Foraging					up and down road	P.pip			
F003	21:46	N.noc	1	NS							N.noc			
F004	21:56	P.pip	1	S	F - Foraging					around trees	P.pip			
F005	22:04		?							check this time for activity	P.pip			
F006	22:10	P.pip	1	S							P.pip			
F007	22:16	P.pip	1	S	F - Foraging					seen during point count	P.pip			
F008	22:20	P.pip	1	NS	F - Foraging					and socialising	P.pip			
F009	23:02	P.pip	1	NS	S - Socialising						P.pip			
F010										SURVEY CUT SHORT DUE TO ACCESS COMPLAINT				
										Are further surveys needed?	Yes			

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference		BAT TRANSECT 10			Surveyor(s)		DBL + LN		Survey type BA1: Bat - Activity (transect)		Date	
Survey Start (24 hours)		Survey End (24 hours)		Sunset		Sunrise		Detector / recording device type		Anabat walkabout				
Transect ID		Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)				
WEATHER CONDITIONS														
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)		Warm and dry				
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	22:22	P.pip		S	F - Foraging		3			Until 22:34 around garden	P.pip			
	22:37	P.pip		NS	F - Foraging					Identified during analysis. P.pip for 2 mins.	P.pip			
F002	22:46	P.pip		NS	F - Foraging					Until 22:48	P.pip			
	22:53	P.pip		NS	F - Foraging					Identified during analysis.	P.pip			
F003	22:59	P.pip		NS	F - Foraging						P.pip			
	23:02	N.sp.			Unknown					Identified during analysis possible Leiser's	N.sp.			
F004	23:03	P.pip	1	S	F - Foraging		3			Foraging along road until 23:09	P.pip			
F005	23:12	P.pip	1	NS	F - Foraging					Heard until 23:20	P.pip			
F006	23:22	N.lei	1	NS	F - Foraging					Most likely Leisers from peak frequency	N.sp.			
	23:25	P.pip	1	NS	F - Foraging					Identified during analysis occasional calls till 23:27	P.pip			
	23:30	N.sp.	1	NS	Unknown					Identified during analysis	N.sp.			
	23:34	P.pip	1	NS	F - Foraging					Identified during analysis	P.pip			
F007	23:42	N.lei	1	NS	F - Foraging					Most likely Leisers from peak frequency	N.sp.			
F008	23:48	M.sp.	1	NS	F - Foraging					Brief	M.sp.			
F009	00:12	P.pip	1	NS	F - Foraging					F004	P.pip			
F010	00:18	P.pip	1	NS	F - Foraging					F003	P.pip			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F011	00:20	N.sp.	1	NS	Unknown					Identified during analysis	N.sp.
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference	BAT TRANSECT 10				Surveyor(s)	JS + AJ		Survey type	BA1: Bat - Activity (transect)		Date	26/07/2017
Survey Start (24 hours)	03:26	Survey End (24 hours)	05:26	Sunset		Sunrise	05:26		Detector / recording device type	Elekon batlogger				
Transect ID	F010	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)				
WEATHER CONDITIONS														
Air Temperature (°C)	17	Wind	2	Cloud Cover	8	Rain	2	Weather Conditions (Description)	Overcast but fairly still with drizzle starting at 04:30 getting increasingly heavy by 05:30					
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
										Logger D4 Clock is 1 hour fast therefore acoustic data appears 1 hour ahead.				
										Access revoked to large areas of site, new route/stopping points improvised on the day of survey. Map included in				
F001	04:33	N/A	1	N/A				155		added from analysis	M.sp.			
F002	03:37	P.pip	1	NS	C - Commuting	Unk		165&166		Between stop 10 and 1	P.pip			
F003	03:48	P.pip	1	NS	C - Commuting	Unk		175, 176 & 181		Between stop 1 and 2, briefly	P.pip			
F004	03:52	N.noc	1	NS	C - Commuting	Unk		190		Very brief at stop 2	N.noc			
F005	03:59	P.pip	1	NS	C - Commuting	Unk		196		Brief between stop 2 and 3	P.pip			
F006	04:04	E.ser	1	NS	Unknown	Unk		199		Brief at stop 3	E.ser			
F007	04:06	P.pip	1	NS	Unknown	Unk		201		Brief at stop 3	P.pip			
F008	04:18	P.pip	1	NS	Unknown	Unk		206&207		Heard only on Capland Lane	P.pip			
F009	04:23	P.pip	1	NS	Unknown	Unk		210		Heard only on Capland Lane	P.pip			
F010	04:34	P.pyg	1	NS	Unknown	Unk		217		Heard between stops 4 and 5	P.pip			
F011	04:40	P.pip	1	S	Unknown	N	3	220		Seen by stop 6	P.pip			
F012	04:45	N/A	1	N/A				222-235		added from analysis, until 04:49	P.pip			
										Are further surveys needed?				

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	BAT TRANSECT 10			Surveyor(s)	JS + AJ		Survey type	BA1: Bat - Activity (transect)		Date	25/07/2017
Survey Start (24 hours)	21:08	Survey End (24 hours)	00:08	Sunset	21:08	Sunrise	05:19		Detector / recording device type	Elekon batlogger			
Transect ID	F010	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
WEATHER CONDITIONS													
Air Temperature (°C)	20	Wind	1	Cloud Cover	2	Rain	0	Weather Conditions (Description)	Clear, fine and still with cloud on the horizon				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
										Logger D4 Clock is 1 hour fast therefore acoustic data appears 1 hour ahead.			
										Access revoked to large areas of site, new route/stopping points improvised on the day of survey. Map included in			
F001	21:40	N/A	1	N/A				21		added from analysis	P.pip		
F002	22:01	P.pip	1	NS	C - Commuting	Unk		29&30		Quiet	P.pip		
F003	22:04	N/A	1	N/A				32		added from analysis	N.lei		
F004	22:07	P.pip	1	NS	C - Commuting	Unk		34		Heard at stopping point 4	P.pip		
F005	22:10	P.pip	1	NS	C - Commuting	Unk		40		Heard at stopping point 4	P.pip		
F006	22:12	P.pip	1	S	F - Foraging	W	3	46-73		Foraging along hedge line of Capland Lane until 23:19	P.pip		
F007	22:28	P.pip	1	N/A				75		added from analysis	P.pip		
F008	22:49	P.pip	1	NS	C - Commuting	Unk		88		Heard briefly	P.pip		
F009	23:53	P.pip	1	N/A				89		added from analysis	P.pip		
F010	23:04	E.ser	1	NS	C - Commuting	Unk		92		Heard only, Capland Lane	E.ser		
F011	23:10	P.pip	1	NS	F - Foraging	Unk		96-106		until 23:12	P.pip		
F012	23:20	P.pip	1	NS	S - Socialising	Unk		112		Heard only on junction of Capland Lane and A358, possible N.noc instead	P.pip		
F013	23:20	N/A	1	N/A				114		added from analysis	M.sp.		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F014	23:20	N/A	1	N/A				115		added from analysis	P.pip
F015	23:23	E.ser	1	NS	F - Foraging	Unk		117 & 118		Heard on A358	E.ser
F016	23:26	Unknown	1	S	C - Commuting	Unk		122		Heard only, likely flying in enclosed area	P.pip
F017	23:29	P.pip	1	S	C - Commuting	Unk		129-132		Heard only at stop 9	P.pip
F018	23:36	P.pip	1	S	F - Foraging	Unk		133-143		Heard only, until 23:42	P.pip
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY																									
Ecology ID		Land Parcel Reference		multiple		Surveyor(s)		JD GG		Survey type		BA1: Bat - Activity (transect)		Date											
20:02		330078		23:03		Sunset		20:02		Sunrise		Detector / recording device type and number		Anabat walkabout											
Survey Start (24 hours)		Survey End (24 hours)		Transect start Northings (Y)		Transect start Eastings (X)		Transect end Eastings (X)		Transect end Northings (Y)															
F010		330078		119119		119119		330078		119119															
WEATHER CONDITIONS																									
Air Temperature (°C)		Wind		0		Cloud Cover		1		Rain		0		Weather Conditions (Description)											
11														Dry, cool, calm.											
OBSERVATIONS																									
Point Counts		1		2		3		4		5		6		7		8									
Start: 20:08 23:00 Finish: 20:11 23:03		Start: 20:18 22:48 Finish: 20:21 22:51		Start: 20:27 22:40 Finish: 20:30 22:43		Start: 20:38 22:29 Finish: 20:41 22:32		Start: 20:49 Finish: 20:52		Start: 21:02 Finish: 21:05		Start: 21:25 22:24 Finish: 21:28 22:27		Start: 21:37 22:17 Finish: 21:40 22:20											
9		10		Start: 21:44 22:09 Finish: 21:47 22:12		Start: 21:50 21:59 Finish: 21:53 22:02																			
Observation no. (align with map)		Time (24 hours)		Species		No. of bats		Seen (S) / Not Seen (NS)		Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)		Direction of flight		Approx. Flight Height (m)		Track no.		Track time		Point Count number		Notes		Sound analysis result	
F001		20:49		P.pip		1		S		F - Foraging		E		5						5		Foraging passes for 3 mins over point and garden lawn.			
F002		20:58		P.pip		1		NS		C - Commuting															
F003		21:21		P.pip		1		NS		F - Foraging															
F004		21:25		E.ser		1		NS		C - Commuting										7		Serotine?			
F005		21:32		P.pip		1		NS		F - Foraging										10					
F006		22:00		P.pip		1		NS		S - Socialising															
F007		22:56		Unknown		1		NS		Unknown		E										Potential sighting of bat. No recording was made.			
											Are further surveys needed?														

BA1-BA4 BAT ACTIVITY SURVEY																																
Ecology ID	transect 10		Land Parcel Reference				Surveyor(s)	AJ&EC		Survey type	BA1: Bat - Activity (transect)			Date	20/09/2017																	
Survey Start (24 hours)	19:15		Survey End (24 hours)	22:15		Sunset	19:15		Sunrise			Detector / recording device type and number	Elekon batlogger																			
Transect ID	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)		Transect end Northings (Y)																								
WEATHER CONDITIONS																																
Air Temperature (°C)	16		Wind	2		Cloud Cover	8		Rain	1		Weather Conditions (Description)	light drizzle overcast																			
OBSERVATIONS																																
Point Counts	1		Start: 19:20 Finish: 19:23		2		Start: 19:34 Finish: 19:37		3		Start: 19:49 Finish: 19:52		4		Start: 20:01 Finish: 20:03		5		Start: 20:06 Finish: 20:09		6		Start: 20:21 Finish: 20:25		7		Start: 20:52 Finish: 20:55		8		Start: 21:19 Finish: 21:22	
		9		Start: 21:28 Finish: 21:31		10		Start: 21:45 Finish: 21:48		(9) Start: 21:58 (10) Start: 22:00																						
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result																				
F001	19:40	P.pip	1	S	C - Commuting	S	3m	385			Commuting along hedgerow Soton D3	P.pip																				
F002	20:04	E.ser	1	NS	C - Commuting			494			Brief call 28khz. 494-495	N.lei																				
	20:46	P.pip	1	NS	C - Commuting			768			Added.	P.pip																				
	21:09	E.ser	1	NS	C - Commuting			905			Added.	E.ser																				
	21:30	P.pip	1	NS	C - Commuting			1058			Added.	P.pip																				
F003	21:58	P.pip	1	NS	C - Commuting			1219			HNS 39khz	M.sp.																				
											Are further surveys needed?																					

BA1-BA4 BAT ACTIVITY SURVEY																																
Ecology ID	transect 10		Land Parcel Reference				Surveyor(s)	KG&JS		Survey type	BA1: Bat - Activity (transect)			Date	20/09/2017																	
Survey Start (24 hours)	18:12		Survey End (24 hours)	21:12		Sunset	18:12		Sunrise				Detector / recording device type and number	Elekon batlogger																		
Transect ID	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)																							
WEATHER CONDITIONS																																
Air Temperature (°C)	12		Wind	0		Cloud Cover	8		Rain	1		Weather Conditions (Description)	foggy, cool, overcast																			
OBSERVATIONS																																
Point Counts	1		Start: 18:12 Finish: 18:17		10		Start: 18:23 Finish: 18:27		9		Start: 18:29 Finish: 18:34		8		Start: 18:37 Finish: 18:47		7		Start: 18:52 Finish: 18:58		6		Start: 19:04 Finish: 19:10		5		Start: 19:22 Finish: 19:28		4		Start: 19:40 Finish: 19:45	
		3		Start: 19:54 Finish: 20:00		2		Start: 20:08 Finish: 20:15		1		Start: 20:20 Finish: 20:25		10		Start: 20:30 Finish: 20:33		9		Start: 20:35 Finish: 20:38		8		Start: 20:42 Finish: 20:45		7		Start: 20:50 Finish: 20:55				
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result																				
F001	18:39	p.pip	1	NS	F - Foraging			181		8	found on analysis																					
F001	18:43	p.pip	1	NS	F - Foraging			195		8	found on analysis																					
F001	18:43	p.pip	1	NS	F - Foraging			196		8	found on analysis																					
F001	18:46	p.pip	1	NS	F - Foraging			203		8	found on analysis																					
F001	18:46	p.pip	1	NS				204		8	changed track no. & time																					
F001	18:48	p.pip	1	NS	F - Foraging			214			found on analysis																					
F001	18:52	p.pip	1	NS	C - Commuting			261		7	found on analysis																					
F002	18:52	p.pip	1	NS	F - Foraging			265		7																						
F001	18:52	p.pip	1	NS	F - Foraging			266		7	found on analysis																					
F001	18:53	p.pip	1	NS	F - Foraging			267		7	found on analysis																					
F001	18:53	p.pip	1	NS	F - Foraging			270		7	found on analysis																					
F001	18:54	p.pip	1	NS	C - Commuting			274		7	found on analysis																					
F001	18:55	p.pip	1	NS	C - Commuting			276		7	found on analysis																					
F001	19:01	p.pip	1	NS	C - Commuting			320			found on analysis																					

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result
F001	19:07	p.pip	1	NS	S - Socialising			341		6	found on analysis	
											Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference	Transect1			Surveyor(s)	D. Byett + T. Jones		Survey type	BA1: Bat - Activity (transect)		Date	24/05/2017
Survey Start (24 hours)	21:18	Survey End (24 hours)	23:24	Sunset	21:08	Sunrise		Detector / recording device type	AW5 walkabout				
Transect ID	9	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)					
WEATHER CONDITIONS													
Air Temperature (°C)	18	Wind	0	Cloud Cover	1	Rain	0	Weather Conditions (Description)	clear				
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
F001	21:45	N.noc	1	S	F - Foraging					along tree line	N.noc		
F002	21:50	P.pip	1	S	F - Foraging					along tree line	P.pip		
F003	21:56	P.pip	1	S	F - Foraging					along road by hedgerow	P.pip		
F004	22:02	P.pip	1	NS						Not recorded	Unknown		
F005	22:11	P.pip	1	NS							P.pip		
F006	22:13	P.pip	1	NS						Not recorded	Unknown		
F007	22:15	P.pip	1	NS	S - Socialising					Not recorded	Unknown		
F008	22:22	P.pip	1	NS	F - Foraging						P.pip		
F009	22:26	P.pip	1	NS						Not recorded	Unknown		
F010	22:31	P.pip	1	NS						Not recorded	Unknown		
F011	22:41	P.pip	1	NS						Not recorded	Unknown		
F012	22:44	P.pip	1	NS						Not recorded	Unknown		
F013	22:50	P.pip	1	NS							P.pip		
F014	23:03	P.pip	1	NS							P.pip		
F015	23:05	P.pip	1	NS	C - Commuting						Unknown		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	23:07	P.pip	1	NS	C - Commuting						Unknown
F017	23:13	P.pip	1	NS	F - Foraging						P.pip
	23:14									Possible Serotine found during analysis	E.ser
F018	23:18	P.pip	1	NS	F - Foraging						Unknown
F019	23:20	P.pip	1	NS	F - Foraging						P.pip
										Are further surveys needed?	Yes

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference			Surveyor(s)		DBI LN		Survey type		BA1: Bat - Activity (transect)		Date
Survey Start (24 hours)		21:30	Survey End (24 hours)		00:30	Sunset	21:30	Sunrise	Detector / recording device type		Anabat walkabout		21/06/2017
Transect ID	Transect start Eastings (X)		Transect start Northings (Y)				Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS													
Air Temperature (°C)		21	Wind		1	Cloud Cover	2	Rain	0	Weather Conditions (Description)		Breezy and warm	
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result		
	22:00	N.noc	1	NS	C - Commuting	N/A				Identified during analysis	N.noc		
F001	22:01	P.pip	1	NS	C - Commuting	N/A				Faint	P.pip		
	22:02	N.noc	1	NS	C - Commuting	N/A				Identified during analysis	N.noc		
F002	22:07	N.noc	1	S	F - Foraging	N/A	30			Foraging around field	N.noc		
F003	22:18	P.pip	2	S	F - Foraging	N/A	2			Foraging up and down track, West to East (calls for 5 mins)	P.pip		
F004	22:22	P.pip	1	NS	F - Foraging	N/A				and noctule, Faint	P.pip		
	22:22	N.noc	1	NS	C - Commuting	N/A					N.noc		
F005	22:31	P.pip	2	S	F - Foraging	N/A				Continuous calls till 22:38	P.pip		
F006	22:38	P.pip	1	S	F - Foraging	N					P.pip		
F007	22:41	P.pip	1	NS	F - Foraging	N/A				Occasional calls for 4mins	P.pip		
	22:49	P.pip	1	NS	F - Foraging	N/A				Identified during analysis	P.pip		
	22:57	N.lei	1	NS	F - Foraging					Identified during analysis, occasional calls till 23:05. Most call frequencies peaking at 25kHz and just under suggesting Leislers bat	N.lei		
F008	23:02	N.lei	1	NS	F - Foraging	N/A					N.lei		
F009	23:06	N.lei	1	NS	F - Foraging	N/A					N.lei		
F010	23:13	N.lei	1	NS	F - Foraging	N/A				and P.pip (lower peaks around 21-23kHz, noctule or Leislers possible)	N.sp.		
F011	23:13	P.pip	1	NS	F - Foraging	N/A				Occasional calls for 6mins	P.pip		
	23:19	N.sp.	1	NS	C - Commuting	N/A				Identified during analysis, peaking at 23kHz	N.sp.		
F012	23:24	P.pip	1	NS	F - Foraging	N/A				Faint	P.pip		
F013	23:31	P.pip	1	NS	F - Foraging	N/A				and Leisler's	P.pip		
F014	23:32	N.lei	1	NS	F - Foraging	N/A				Same area as F008	N.lei		
F015	23:39	N.lei	1	NS	F - Foraging	N/A				Occasional calls for 4 mins	N.lei		
	22:40	P.pip	1	NS	Unknown	N/A				Identified during analysis	P.pip		
F016	23:57	P.pip	1	NS	F - Foraging	N/A				Same area as F005, occasional for 7 mins	P.pip		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
	00:08	Unknown	1	NS	Unknown	N/A				Identified during analysis, very faint and brief, either myotis or longeared	Unknown	
	00:10	P.pip	1	NS	Unknown	N/A					Identified during analysis	P.pip
	00:10	Unknown	1	NS	Unknown	N/A					Identified during analysis, brief and faint, likely myotis or longeared	Unknown
	00:14	Unknown	1	NS	Unknown	N/A					Identified during analysis, brief and faint, likely myotis or longeared	Unknown
F017	00:14	P.pip	1	NS	F - Foraging	N/A					Occasional calls for 3 mins	P.pip
F018	00:18	P.pip	1	NS	F - Foraging	N/A					Occasional calls for 4 mins (end of survey)	P.pip
										Are further surveys needed?		

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference		Surveyor(s)		JG LS		Survey type		BA1: Bat - Activity (transect)		Date
Survey Start (24 hours)		03:30	Survey End (24 hours)		05:45	Sunset	Sunrise	05:30		Detector / recording device type		Elekon batlogger
Transect ID	F011	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)		
WEATHER CONDITIONS												
Air Temperature (°C)		15	Wind		0	Cloud Cover	8	Rain	0	Weather Conditions (Description)		Calm
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001	03:33	P.pip	2	S	F - Foraging	E	3	25	03:33	foraging along road		
F002	03:37	P.pip	1	ns	F - Foraging	Unk		56	03:37	foraging along road		
F003	03:48	P.pip	1	ns	F - Foraging	Unk		94	03:48	foraging along tree line		
F004	03:52	P.pip	1	ns	Unknown	Unk		107	03:52			
F005	04:07	P.pip	1	ns	Unknown	Unk		135	04:07			
F006	04:20	P.pip	1	ns	F - Foraging	Unk		170	04:20	corner by muck pile		
F007	04:23	P.pip	1	ns	F - Foraging	Unk		190	04:23	foraging along road		
F008	04:27	P.pip	1	NS	Unknown	Unk		202	04:27			
										Are further surveys needed?		

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference			Surveyor(s)		JG LS		Survey type		Date	
21:08		00:08			21:08		Sunrise		Elekon batlogger		26/07/2017	
Survey Start (24 hours)		Survey End (24 hours)		Sunset		Sunrise		Detector / recording device type		Date		
Transect ID	F011	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)		Wind		Cloud Cover		Rain		Weather Conditions (Description)				
18		3		1		0		Dry and breezy				
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	
F001	21:11	P.pip	1	S	F - Foraging	NE	2.5	11	21:11	FORAGING BACK AND FORTH ALONG ROAD		
F002	21:30	P.pip	1	S	F - Foraging	N/A	4	60	21:30	FORAGING ALONG HEDGEROW CLOSE TO WATERCOURSE		
F003	21:36	P.pip	2	S	F - Foraging	E	4.5	92	21:36	CIRCLING IN CORNER OF FIELD		
F004	21:41	P.pip	1	S	C - Commuting	E	8	106	21:41	FLEW TO WOODLAND AREA		
F005	21:54	P.pip	1	S	C - Commuting	S	4	145	21:54	CROSSING TRACK		
F006	21:58	P.pip	1	S	C - Commuting	S	4	149	21:58			
F007	22:01	P.pip	2	S	F - Foraging	W	5	162	22:01			
F008	22:07	P.pip	1	NS	Unknown			176	22:07			
F009	22:12	P.pip	1	NS	C - Commuting			180	22:12			
F010	22:14	P.pip	1	NS	F - Foraging			185	22:14	CORNER OF FIELD		
F011	22:18	P.pip	1	NS	Unknown			201	22:18			
F012	22:23	P.pip	2	NS	F - Foraging			212	22:23	FORAGING IN CORNER OF FIELD		
F013	22:57	p.pyg	1	NS	F - Foraging			293	22:57	CORNER BY STREAM		
F014	23:21	P.pip	1	NS	F - Foraging			370	23:21			
F015	23:33	P.pip	1	NS	Unknown			410	23:33			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result
F016	23:53	P.pip	1	NS	Unknown			462	23:53	SAME AS 2	
F017	23:58	P.pip	1	NS	Unknown			480	23:58		
F018	00:00	P.pip	2	S	F - Foraging		3	488	00:00		
										Are further surveys needed?	

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference		Transect 11			Surveyor(s)		AJ & TJ		Survey type	BA1: Bat - Activity (transect)	Date	22/08/2017		
Survey Start (24 hours)	20:19	Survey End (24 hours)	23:20	Sunset	20:19	Sunrise		Detector / recording device type and number		Anabat walkabout						
Transect ID		Transect start Eastings (X)		Transect start Northings (Y)				Transect end Eastings (X)			Transect end Northings (Y)					
WEATHER CONDITIONS																
Air Temperature (°C)	19	Wind	8	Cloud Cover	0	Rain	0	Weather Conditions (Description)		humid and mild						
OBSERVATIONS																
Point Counts	1	Start: 20:17 Finish: 20:20	2	Start: 20:26 Finish: 20:29	3	Start: 20:45 Finish: 20:48	4	Start: 20:55 Finish: 20:58	5	Start: 21:22 Finish: 21:25	6	Start: 22:03 Finish: 22:06	7	Start: 22:50 Finish: 22:53	8	Start: 22:58 Finish: 23:01
	9	Start: 23:06 Finish: 23:09	10	Start: 23:17 Finish: 23:20												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent, R = Returning to roost, F = Foraging, C = Commuting, S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Point Count number	Notes	Sound analysis result				
F001	20:48	P.pip	1	NS	C - Commuting					3						
F002	21:25	P.pip	1	NS	C - Commuting											
F003	21:38	P.pip	1	NS												
F004	21:53	P.pip	1	NS												
F005	22:11	P.pip	1	NS	S - Socialising											
F006	22:31	P.pip	1	NS	F - Foraging						Up and down Folly Drove					
F007	22:40	Unknown	1	NS							myotis					
F008	22:50	P.pip	1	NS	S - Socialising					7						
F009	22:58	P.pip	1	NS	C - Commuting											
F010	23:07	P.pip	1	NS						9						
F011	23:12	Unknown	1	NS							myotis					
											Are further surveys needed?					

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID	Transect 11		Land Parcel Reference	A358 - BAT TRANSECT 11			Surveyor(s)	AM & RW		Survey type	BA1: Bat - Activity (transect)		Date	18/10/2017
Survey Start (24 hours)	18:13	Survey End (24 hours)	21:13	Sunset	18:13	Sunrise			Detector / recording device type	Anabat Walkabout 3 (Southampton)				
Transect ID	11 DUSK - REVERSE	Transect start Eastings (X)	330727	Transect start Northings (Y)	118250		Transect end Eastings (X)	329649		Transect end Northings (Y)	118865			
WEATHER CONDITIONS														
Air Temperature (°C)	12	Wind	1	Cloud Cover	8	Rain	1		Weather Conditions (Description)	Cloudy + little wind - fine mist/ damp				
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result			
F001	18:13									Waypoint 10				
F001 B	18:23									Waypoint 9				
F002	18:31									Waypoint 8				
F002 B	18:39									Waypoint 7				
F003	18:51	P.pip	1	NS	F - Feeding					and again at 18:53				
F004	18:54	P.pip	1	NS	F - Feeding					near Waypoint 6				
F004 B	18:56									Waypoint 6 - after which, due to cows, took alternate route to Waypoint 5, re-parking car, -See plan.				
F005	19:07	P.pip	1	NS	F - Feeding					P.pip classed as 'feeding' due to continued presence rather than merely commuting through				
F006	19:56									Waypoint 5. (having walked East of Wapoint 5 from <u>Parking 2</u> . (see plan)				
F007	20:02	P.pip	1	NS	C - Commuting									
F008	20:16									Waypoint 4				
F008 B	20:24									Waypoint 3				
F009	20:50									Waypoint 2				
F010	20:58									Waypoint 1				
F011	21:13									END OF SURVEY ON TRANSECT ROUTE & HEADING TO PARKING 2.				

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID		Land Parcel Reference		T12			Surveyor(s)		RW JW		BA1: Bat - Activity (transect)		Date	29/05/2020	
Survey Start (24 hours)		21:14	Survey End (24 hours)		00:14	Sunset	21:11	Sunrise		Detector / recording device type		Anabat Walkabout 5			
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)					
WEATHER CONDITIONS															
Air Temperature (°C)		16		Wind		1	Cloud Cover		30%	Rain		0	Weather Conditions (Description)		dry warm still
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)			Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes		Sound analysis result	
F	21:24:00	Noctule	1	S	Commuting							flyng to north towards 358		Not Recorded	
F2	21:28:00	Noctule	1	S	Commuting							flyng high over field to east		Confirmed	
F3	21:29:00	Noctule	1		Commuting							all commuting southwest to northeast		Confirmed	
F4	21:32:00	Serotine	1		Commuting									Confirmed	
F5	21:30:00	Soprano pipistrelle	1	NS	Commuting									Not Recorded	
F6	21:32:00	Noctule	1	S	Foraging							foraging high over field.continuous		Confirmed	
F7	21:34:00	Common pipistrelle	1	NS	Commuting							just before underpass		Confirmed	
F8	21:36:00	Noctule	1	NS	Unknown							p1		Confirmed	
F9	21:39:00	Common pipistrelle	1	S	Commuting							commuting along hedgerow east to west just by underpass		Confirmed	
F10	21:39:00	Noctule	1	NS	Foraging							continuous foraging		Confirmed	
F11	21:40:00	Soprano pipistrelle	2	NS	Commuting									Confirmed	
F12	21:41:00	Common pipistrelle	1	S	Foraging							foraging to north of cp17 hedgerow		Confirmed	
F13	21:48:00	Common pipistrelle	1	NS	Commuting									Confirmed	
F14	21:56:00	Common pipistrelle	1	NS	Commuting									Confirmed	
	21:59:00	Soprano pipistrelle			Unknown									Found in Analysis	

BA1-BA4 BAT ACTIVITY SURVEY																
Ecology ID		Land Parcel Reference			T12		Surveyor(s)		BC PN		BA1: Bat - Activity (transect)		Date			
Survey Start (24 hours)		21:29	Survey End (24 hours)		00:44	Sunset	21:20		Sunrise		Detector / recording device type	Anabat Walkabout 5				
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)								
WEATHER CONDITIONS																
Air Temperature (°C)		13	Wind		1	Cloud Cover	100%		Rain	2	Weather Conditions (Description)		warm evening light rain			
OBSERVATIONS																
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C =)			point count number		Track no.	Track time		Notes		Sound analysis result	QA result
F	21:43:00	Soprano pipistrelle	1	NS	Unknown			1		14			Changed from Common to Soprano Pipistrelle during analysis		Amended	Confirmed
F2	21:44:00	Soprano pipistrelle	1	NS	Foraging			1		19					Confirmed	Confirmed
F3	21:45:00	Common pipistrelle														Found in Analysis
F3	21:55:00	Common pipistrelle	1	NS	Foraging			2		63			three mins of recordings		Confirmed	Confirmed
	21:58:00	Soprano pipistrelle	1	NS	Unknown					75					Found in Analysis	Confirmed
	22:00:00	Common pipistrelle	1	NS	Unknown					75					Found in Analysis	Confirmed
F4	22:02:00	Common pipistrelle	1	NS	Foraging			2		98					Confirmed	Confirmed
F5	22:04:00	Soprano pipistrelle	1	NS	Commuting			3		104			Changed from Common Pipistrelle to Soprano Pipistrelle during analysis		Amended	Amended
F6	22:20:00	Soprano pipistrelle	1	NS	Foraging			3		123					Confirmed	Confirmed
F7	22:22:00	Soprano pipistrelle	1	S	Foraging			3		130					Confirmed	Confirmed
	22:24:00	Common pipistrelle	1	NS	Unknown					131					Found in Analysis	Confirmed
	22:25:00	Soprano pipistrelle	1	NS	Unknown					136					Found in Analysis	Confirmed
F8	22:26:00	Soprano pipistrelle	1	NS	Foraging			4		143					Confirmed	Amended
F9	22:27:00	Common pipistrelle	1	NS	Commuting			4		145			and Soprano Pip		Confirmed	Amended
F10	22:33:00	Soprano pipistrelle	1	S	Foraging			4		153					Confirmed	Confirmed
F11	22:33:00	Common pipistrelle	1	NS	Foraging			4		159					Confirmed	Confirmed
F12	22:35:00	Common pipistrelle	1	S	Foraging			4		162			recorded for 4 mins Sop pip also		Confirmed	Confirmed

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C =				point count number	Track no.	Track time	Notes	Sound analysis result	QA result
F13	22:41:00	Common pipistrelle	2	S	Foraging				4	184	until 22:42		Confirmed	Confirmed
F14	22:45:00	Common pipistrelle	2	S	Foraging				4	204			Corrupted	Confirmed
F15	22:59:00	Soprano pipistrelle	1	NS	Foraging				4	306			Corrupted	Confirmed
F16	23:06:00	Soprano pipistrelle	1	NS	Foraging				4	332			Corrupted	Confirmed
F17	23:12:00	Soprano pipistrelle	1	NS	Foraging				5	376			Confirmed	Confirmed
F18	23:15:00	Common pipistrelle	1	NS	Foraging				5	378			Confirmed	Confirmed
	23:19:00	Long-eared bat	1	NS	Unknown					413			Found in Analysis	Amended
F19	23:19:00	Soprano pipistrelle												Found in Analysis
F19	23:33:00	Soprano pipistrelle	1	S	Foraging				5	456			Corrupted	Confirmed
F20	23:43:00	Soprano pipistrelle	2	NS	Foraging				6	506			Corrupted	Confirmed
F21	23:50:00	Soprano pipistrelle	1	NS	Foraging				6	539			Corrupted	Confirmed
F22	00:09:00	Common pipistrelle	1	NS	Foraging				7	616			Corrupted	Confirmed
F23	00:22:00	Soprano pipistrelle	1	NS	Foraging				8	669			Corrupted	Confirmed
F24	00:40:00	Soprano pipistrelle	1	NS	Foraging				10	768			Corrupted	Confirmed

BA1-BA4 BAT ACTIVITY SURVEY																			
Ecology ID	Land Parcel Reference			T12	Surveyor(s)	LF CD	BA1: Bat - Activity (transect)					Date	16/07/2019						
Survey Start (24 hours)	21:21	Survey End (24 hours)	00:21	Sunset	21:21	Sunrise	Detector /	Anabat Walkabout 5											
Transect ID	12	Transect start Eastings (X)	Transect start Northings (Y)																
WEATHER CONDITIONS																			
Air Temperature (°C)	16	Wind	1	Cloud Cover	0%	Rain	0	Weather Conditions											
OBSERVATIONS																			
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	QA Result							
F1	21:35:00	Pipistrelle sp.	1	S	Commuting					seen in distances	Not Recorded	Confirmed							
F2	21:36:00	Pipistrelle sp.	1	S						flying along hedgerow into tree line	Not Recorded	Confirmed							
F3	21:36:00	Noctule		NS							Confirmed	Amended							
F4	21:38:00	Noctule	1	S	Commuting					55 track. map 2	Confirmed	Amended							
F5	21:41:00	Common pipistrelle	1	S	Commuting					57. heading towards weir bear high potential trees	Confirmed	Amended							
F6	21:41:00	Noctule	1	S	Commuting					using hedgeline on map	Amended	Amended							
F7	21:42:00	Soprano pipistrelle	1	S	Foraging					several passes 10m south of point count 2	Confirmed	Amended							
F8	21:55:00	Soprano pipistrelle	1	S	Foraging					#118 several sop pip passess along hedge 239	Not Recorded	Confirmed							
F9	22:01:00	Common pipistrelle	1	NS	Unknown			p3		#159	Not Recorded	Confirmed							
F10	22:04:00	Pipistrelle sp.	2		Foraging					164 and 165. at corner of wood after point 3. two pip specues	Not Recorded	Confirmed							
F11	22:06:00	Common pipistrelle	1	S	Foraging					180 pip using hedgerow towards point 3 for foraging	Not Recorded	Confirmed							
F12	22:08:00	Soprano pipistrelle	1		Foraging					foraging at woodland edge	Not Recorded	Confirmed							
F13	21:13:00	Common pipistrelle	1	NS							00:00:00	Not Recorded	Confirmed						
F14	22:26:00	Leisler's bat	1	NS							00:00:00	Not Recorded	Confirmed						
F15	22:36:00	Noctule	1	S	Foraging					362 foraging along hedge and from wood see map	Amended	Amended							
F16	22:42:00	Common pipistrelle	1	S	Foraging					using eoodland edge as lp 4	Amended	Amended							
F17	22:43:00	Nyctalus sp.	1	NS							Confirmed	Confirmed							
F18	22:53:00	Leisler's bat	2		Socialising						Not Recorded	Confirmed							
F19	23:00:00	Leisler's bat	2		Socialising					common pip heard at same time	Not Recorded	Confirmed							

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)			Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes	Sound analysis result	QA Result
F20	23:01:00	Common pipistrelle										continuous foraging	Not Recorded	Confirmed Recording does not exist
F21	23:18:00	Common pipistrelle	1	NS	Unknown							poss socialising	Not Recorded	Confirmed Recording does not exist
F22	23:22:00	Soprano pipistrelle	1	NS	Commuting							521. in wood inlet	Not Recorded	Confirmed Recording does not exist
F23	23:27:00	Soprano pipistrelle	1	NS								track 538	Not Recorded	Confirmed Recording does not exist
F24	23:32:00	Soprano pipistrelle	1	S	Foraging							23:36at point 7. see map for flight path. several passes during point count	Not Recorded	Confirmed Recording does not exist
F25	23:36:00	Pipistrelle sp.	4	S	Foraging							continuous foraging in cow field in front of Jordan	Not Recorded	Confirmed Recording does not exist
F26	23:40:00	Common pipistrelle	1									near chapel	Not Recorded	Confirmed Recording does not exist
F27	23:40:00											600, Leisler	Not Recorded	Confirmed Recording does not exist
F28	23:43:00	Unknown	1									pass sardine. 612	Not Recorded	Confirmed Recording does not exist
F29	23:44:00	Common pipistrelle	1									nearby at point 8. pass leisler at 622	Not Recorded	Confirmed Recording does not exist
F30	23:47:00	Common pipistrelle	2	NS	Foraging							631. point 8. at watercourse non stop pips heard in woodland. passes for full listening point. Leisler at track 6	Not Recorded	Confirmed Recording does not exist
F31	23:58:00	Myotis sp.	1	NS								gaub habitat 681. at river	Not Recorded	Confirmed Recording does not exist
F32	00:00:00	Soprano pipistrelle											Not Recorded	Confirmed Recording does not exist
F33	00:04:00	Common pipistrelle	1									at listening point 10. numerous passes	Confirmed	Confirmed

BA1-BA4 BAT ACTIVITY SURVEY																	
Ecology ID		Land Parcel Reference		T12			Surveyor(s)		BC GG		BA1: Bat - Activity (transect)		Date	21/08/2019			
Survey Start (24 hours)		03:08		Survey End (24 hours)		06:08		Sunset		Sunrise		06:08		Detector / recording device type		Anabat Walkabout 5	
Transect ID		12		Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)							
WEATHER CONDITIONS																	
Air Temperature (°C)		13		Wind		1		Cloud Cover		100%		Rain		2		Weather Conditions (Description)	
OBSERVATIONS																	
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	Direction of flight	Approx. Flight Height (m)	Track no.	Track time	Notes			Sound analysis result				
F1	03:45:00	Soprano pipistrelle	1	NS	Foraging					p7			Confirmed				
F2	03:57:00	Soprano pipistrelle	1	NS	Foraging					p7			Confirmed				
F3	04:37:00	long eared bat	1	NS	Foraging					p4			Amended				
F4	04:39:00	long eared bat	1	S	Foraging					p4			Amended				
F5	04:42:00	serotine											Found in analysis				
F6	05:40:00	Soprano pipistrelle	1	S	Foraging					p1			Confirmed				
F7	05:51:00	Soprano pipistrelle	1	NS	Foraging					p10			Confirmed				
F8	05:53:00	Soprano pipistrelle	3	S	return to roost					p10			Confirmed				

BA1-BA4 BAT ACTIVITY SURVEY															
Ecology ID		Land Parcel Reference	T12			Surveyor(s)	BC GG		BA1: Bat - Activity (transect)		Date	21/08/2019			
Survey Start (24 hours)	20:20	Survey End (24 hours)	23:20	Sunset	20:20	Sunrise		Detector / recording device type	Anabat Walkabout 5						
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)							
WEATHER CONDITIONS															
Air Temperature (°C)	16	Wind	1	Cloud Cover	40%	Rain	2	Weather Conditions (Description)							
OBSERVATIONS															
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)			point count number	Track no.	Track time	Notes			Sound analysis result	QA results
F1	20:22:00	Soprano pipistrelle	1	NS	Unknown			1					Confirmed	Confirmed	
F2	20:27:00	Soprano pipistrelle	1	NS							P.Pip also recorded		Found in Analysis	Amended	
F3	20:38:00	long eared bat	1	S	Foraging			2			going along hedgerow		Confirmed	Confirmed	
F4	20:40:00	long eared bat	1	S	Foraging			2					Not Recorded	Confirmed	
F5	20:45:00	serotine	1	S	Foraging			2					Confirmed	Confirmed	
F6	20:47:00	Soprano pipistrelle	1	NS	Foraging			3					Confirmed	Confirmed	
F7	20:50:00	Soprano pipistrelle	1	NS	Foraging			3					Confirmed	Confirmed	
F8	20:55:00	Soprano pipistrelle	1	NS	Foraging			3					Confirmed	Confirmed	
	21:03:00	Common pipistrelle	1	S	Foraging			3					Confirmed	Amended	
	21:07:00	Common pipistrelle	1	NS	Foraging			3					Confirmed	Confirmed	
	21:11:00	Common pipistrelle	1	S	Foraging			3					Confirmed	Confirmed	
	21:14:00	Soprano pipistrelle	1	NS	Foraging			3					Confirmed	Confirmed	
	21:15:00	Soprano pipistrelle	1	S	Foraging			3					Confirmed	Confirmed	
	21:16:00	Soprano pipistrelle	1	NS							P.Pyg also recorded		Found in Analysis	Amended	
	21:20:00	Common pipistrelle	1	NS	Foraging			4					Confirmed	Confirmed	
	21:20:00	Myotis sp.	1	NS	Foraging			4					Confirmed	Amended	

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)			point count number	Track no.	Track time	Notes												Sound analysis result	QA results
	21:20:00	Serotine	1	NS																	Found in Analysis	Confirmed		
	21:30:00	Noctule	1	NS	Foraging			5														Confirmed	Confirmed	
	21:30:00	Common pipistrelle	1	NS	Foraging			5														Confirmed	Confirmed	
	21:33:00	Serotine	1	NS	Foraging			5														Confirmed	Confirmed	
	21:35:00	Soprano pipistrelle	1	NS	Socialising			5														Confirmed	Confirmed	
	21:43:00	Soprano pipistrelle	1	NS	Foraging			6														Confirmed	Confirmed	
	21:50:00	Soprano pipistrelle	1	NS	Foraging			7														Confirmed	Confirmed	
	21:55:00	Soprano pipistrelle	1	S	Foraging			7														Confirmed	Confirmed	
	21:56:00	Soprano pipistrelle	1	NS	Foraging			7														Confirmed	Confirmed	
	21:58:00	Serotine	1	S	Foraging			7															Amended	
	21:59:00	Serotine	1	S	Foraging			7															Amended	
	22:01:00	Soprano pipistrelle	1	S	Foraging			7														Confirmed	Confirmed	
	22:18:00	Soprano pipistrelle	1	NS	Foraging			8														Confirmed	Confirmed	
	22:19:00	Myotis sp.	1	NS	Foraging			8															Amended	
	22:24:00	Long-eared bat	1	NS	Foraging			9														Confirmed	Amended	
	22:35:00	Noctule	1	NS	Socialising			9														Confirmed	Confirmed	
	22:55:00	Soprano pipistrelle	1	NS	Foraging			10														Confirmed	Confirmed	
	23:03:00	Noctule	1	NS	Foraging			1														Confirmed	Confirmed	
	23:08:00	Soprano pipistrelle	1	NS	Foraging			1														Confirmed	Confirmed	
	23:10:00	Common pipistrelle	1	NS																		Found in Analysis	Found in Analysis	
	23:13:00	Soprano pipistrelle																				Found in Analysis	Found in Analysis	
	23:15:00	Common pipistrelle																				Found in Analysis	Found in Analysis	

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference			T12			Surveyor(s)	RW TJ		BA1: Bat - Activity (transect)	Date		15/09/2020
Survey Start (24 hours)	19:28	Survey End (24 hours)		20:28	Sunset	19:28	Sunrise		Detector / recording device type	Anabat Walkabout 5				
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS														
Air Temperature (°C)	21	Wind		1	Cloud Cover	10%	Rain	0	Weather Conditions (Description)	warm dry clear				
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C =	point count number	Track no.	Track time	Notes	Sound analysis result				
F	19:30:00	Soprano pipistrelle	1	NS	Foraging				near p1. foraging up and down between river bridge and underpass. Continues until 19:31	Confirmed				
	19:32:00	Noctule	1	NS					Added during analysis.	Found in Analysis				
F2	19:33:00	Soprano pipistrelle	1	NS	Foraging				At point 1	Confirmed				
F3	19:34:00	Noctule	1	S	Foraging				At point 1. multiple calls from same bat as we are walking around the field. again at 20:18 when we were back in the field. again at p9	Confirmed				
F4	19:37:00	Soprano pipistrelle	1	NS	Foraging					Confirmed				
	19:44:00	Common pipistrelle	1	NS					Added during analysis.	Found in Analysis				
F5	19:45:00	Soprano pipistrelle	1	NS	Commuting				along hedgerow near p2. adjacent to road. Continues on and off until 19:52.	Confirmed				
F6	19:55:00	Soprano pipistrelle	1	NS	Commuting				p3 - Continues on and off until 20:01.	Confirmed				
F7	19:56:00	Common pipistrelle	1	S	Foraging				p3 - Continues on and off until 19:58.	Confirmed				
F8	20:00:00	Noctule	1	NS	Commuting				just after p3	Confirmed				
	20:13:00	Soprano pipistrelle	1	NS					Added during analysis.	Found in Analysis				
	20:31:00	Common pipistrelle	1	NS					Added during analysis.	Found in Analysis				
	20:35:00	Nyctaloid	1	NS					Added during analysis.	Found in Analysis				
F9	20:47:00	Common pipistrelle	1	NS	Commuting				p6. Route changed due to cattle. p9 is now p5 and p10 now p6	Confirmed				
F10	20:48:00	Myotis sp.	1	NS	Commuting					Confirmed				
	20:52:00	Pipistrelle sp.	1	NS					Common pip and Soprano pip. added during analysis.	Found in Analysis				

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference			13			Surveyor(s)	RW JW		BA1: Bat - Activity (transect)		Date	26/05/2020
Survey Start (24 hours)	21:04	Survey End (24 hours)		00:04	Sunset	21:04	Sunrise		Detector / recording device type	Anabat Walkabout 5				
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS														
Air Temperature (°C)	18	Wind		2	Cloud Cover	10%	Rain	0	Weather Conditions (Description)	warm clear and dry				
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number	Track no.	Track time	Notes	Sound analysis result				
F1	21:28:00	Noctule	1	S	Commuting				flying in west direction. over field to east of transect route	Confirmed				
F2	21:31:00	Noctule	1	NS	Commuting					Confirmed				
F3	21:41:00	Unknown	1	NS	Commuting					Confirmed				
F4	21:46:00	Noctule	1	NS	Commuting					Confirmed				
F5	21:51:00	Noctule	1	NS	Commuting					Confirmed				
F6	21:51:00	Common pipistrelle	1	S	Commuting				flew along hedgerow east to west. 4m off ground. flew off in direction of a358	Confirmed				
F7	22:22:00	Unknown	1	NS	Unknown		5		heard briefly but not recorded - p5	Confirmed				
F8	22:30:00	Nyctaloid	1	NS	Commuting					Confirmed				
F9	22:33:00	Common pipistrelle	1	NS	Foraging					Confirmed				
F10	22:33:00	Nyctaloid	1	NS	Unknown					Confirmed				
F11	22:34:00	Common pipistrelle	1	NS	Commuting					Confirmed				
F12	22:43:00	Nyctaloid	1	NS	Commuting				not recorded	Confirmed				
F13	23:08:00	Common pipistrelle	1	NS	Commuting					Confirmed				
F14	23:10:00	Serotine	1	NS	Commuting					Confirmed				
F15	23:11:00	Unknown	1	NS	Commuting					Confirmed				
F16	23:12:00	Common pipistrelle	1	NS	Foraging		8		p8	Confirmed				

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number	Track no.	Track time	Notes	Sound analysis result
F17	23:14:00	Unknown	1	NS	Unknown					Confirmed
F18	23:15:00	Noctule	1	NS	Commuting					Confirmed
F19	23:17:00	Unknown	1	NS	Unknown					Confirmed
F20	23:19:00	Common pipistrelle	1	NS	Foraging					Confirmed
F21	23:20:00	Noctule	1	NS	Commuting		9	p9		Confirmed
F22	23:22:00	Common pipistrelle	1	NS	Commuting					Confirmed
F23	23:23:00	Common pipistrelle	1	NS	Unknown					Confirmed
F24	22:29:00	Serotine	1	NS	Commuting					Confirmed
F25	23:41:00	Nyctaloid	1	NS	Commuting					Confirmed
F26	23:42:00	Nyctaloid	1	NS	Foraging					Confirmed
F27	23:46:00	Nyctaloid	1	NS	Commuting		10	p10		Confirmed
F28	23:51:00	Nyctaloid	1	NS	Commuting					Confirmed
F29	23:52:00	Nyctaloid	1	NS	Unknown					Confirmed
F30	23:53:00	Common pipistrelle	1	NS	Commuting					Confirmed
F31	23:54:00	Nyctaloid	1	NS	Unknown					Confirmed

BA1-BA4 BAT ACTIVITY SURVEY													
Ecology ID		Land Parcel Reference			13		Surveyor(s)	JD AB		BA1: Bat - Activity (transect)	Date		23/07/2020
Survey Start (24 hours)	02:23	Survey End (24 hours)		05:26	Sunset		Sunrise	05:26	Detector / recording device type	D4 batlogger			
Transect ID	12	Transect start Eastings (X)			Transect start Northings (Y)			Transect end Eastings (X)			Transect end Northings (Y)		
WEATHER CONDITIONS													
Air Temperature (°C)	12	Wind		1	Cloud Cover	10%	Rain	0	Weather Conditions (Description)	dry, calm , high numbers of invertebrates, feels cold, stop 9 repeated 05:10-05:13			
OBSERVATIONS													
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number	Track no.	Track time	Notes	Sound analysis result			
F	02:23:00	Common pipistrelle	1	S	Commuting				2 passes, track 1215, commuting 3m over road se, stop 10	Confirmed			
F2	02:25:00	Myotis sp.	1	NS	Commuting				1216 track stop 10	Amended			
F3	02:27:00	Common pipistrelle	1	NS	Commuting				1221 1 pass	Amended			
F4	02:28:00	Common pipistrelle	1	S	Commuting				1227 1 pass	Confirmed			
F5	02:28:00	Common pipistrelle	1	S	Foraging				1234 track circling 2m over road	Confirmed			
F6	02:31:00	Common pipistrelle	1	S	Foraging				track 1242 bat flew 3m over hedgerow from the north west, 1246	Confirmed			
F7	02:33:00	Soprano pipistrelle	1	S	Commuting				track 1249 not seen	Confirmed			
F8	02:41:00	Common pipistrelle	1	NS	Commuting				stop 9, track 1274	Amended			
F9	02:47:00	Serotine	1	NS	Commuting				stop 8 track 1287	Confirmed			
F10	02:49:00	Common pipistrelle	1	NS	Commuting				track 1294,	Amended			
F11	03:10:00	Soprano pipistrelle	1	NS	Commuting				track 1393	Confirmed			
F12	03:13:00	Pipistrelle sp.	2	S	Foraging				3 passes, one seen flying se at 5m above field margin next to woodland edge, track 1405-1410 - soprano and common.	Amended			
F13	03:17:00	Common pipistrelle	1	NS	Commuting				one seen flying sw at 5m above field margin, 1415	Confirmed			
F14	03:35:00	Soprano pipistrelle	1	NS	Commuting				track 1457, 2 passes, stop 5	Confirmed			
F15	03:37:00	Common pipistrelle	1	NS	Commuting				track 1470, one pass	Confirmed			
F16	03:41:00	Common pipistrelle	1	NS	Commuting				track 1489	Confirmed			

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number	Track no.	Track time	Notes	Sound analysis result
F17	03:47:00	Common pipistrelle	1	NS	Commuting				track 1505 1506, two passes	Confirmed
F18	03:49:00	Common pipistrelle	1	NS	Foraging				1510 track, multiple passes , track 1512, stop 4	Confirmed
F19	03:53:00	Common pipistrelle	1	NS	Foraging				1519 track 1520 2 passes	Confirmed
F20	04:07:00	Common pipistrelle	1	NS	Foraging				track 1543	Confirmed
F21	04:17:00	Common pipistrelle	1	S	Foraging				stop 2 track 1569 4 passes, one bat seen flying nw and se at 3m agl next to woodland edge	Confirmed
F22	04:23:00	Common pipistrelle	2	NS	Commuting				1581 2 bats seen flying nw 4m above field margin next to woodland	Confirmed
F23	04:50:00	Common pipistrelle	1	S	Foraging				track 1664-1679, multiple passes feeding buzz, seen flying along woodland edge north west to south east, stop 1	Confirmed
F24	03:31:00	Long-eared bat	1	NS	Commuting				Track 1440, 33.7khz (peak)	Found in Analysis
F25	03:37:00	Noctule	1	NS	Commuting				Track 1472 and 1473.	Found in Analysis
F26	03:40:00	Long-eared bat	1	NS	Commuting				Track 1479	Found in Analysis
F27	04:18:55	Noctule	1	NS	Commuting				Track 1574	Found in Analysis
F28	04:32:00	Noctule	1	NS	Commuting				Track 1600	Found in Analysis
F29	05:01:00	Noctule	1	NS	Commuting				Track 1718	Found in Analysis

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference			13		Surveyor(s)		JD AB		BA1: Bat - Activity (transect)		Date	23/07/2020
Survey Start (24 hours)		21:11	Survey End (24 hours)		00:11	Sunset	21:00		Sunrise	Detector / recording device type		Anabat Walkabout 3		
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS														
Air Temperature (°C)		17	Wind		1	Cloud Cover	100%	Rain	0	Weather Conditions (Description)		overcast, dry, calm, humid warm, moderate flying invertebrates, 4/8 cloud at 11pm-12am		
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)		point count number		Track no.	Track time	Notes		Sound analysis result	
F1	21:15:00	Common pipistrelle	1	NS	Commuting						1 pass		Not Recorded	
F2	21:30:00	Soprano pipistrelle	1	NS	Commuting						stop 1, not seen		Confirmed	
F3	21:31:00	Noctule	1	S	Commuting						seen 1 pass along woodland edge, seen flying towards the se stop 1		Confirmed	
F4	21:43:00	Common pipistrelle	1	S	Commuting						seen flying towards sw 4m over hard standing		Confirmed	
F5	21:44:00	Common pipistrelle	1	S	Commuting						seen flying, se to nw to sw multiple passes 4m over hard standing		Confirmed	
F6	21:49:00	Serotine	2	S	Commuting						two passes 15m above grassland, seen flying towards the se		Confirmed	
F7	21:51:00	Common pipistrelle	1	S	Commuting						seen flying along hedgerow at 3m above field margin nw to se to nw multiple passes		Confirmed	
F8	21:54:00	Serotine	1	S	Foraging						seen circling at 10m over wheat		Confirmed	
F9	21:55:00	Common pipistrelle	1	NS	Commuting						stop 2		Confirmed	
F10	21:57:00	Common pipistrelle	1	S	Foraging						stop 2 - four passes, se to nw along woodland edge, then last pass across field towards the north		Confirmed	
F11	21:58:00	Common pipistrelle	1	S	Foraging						stop 2 same as before for three mins		Confirmed	
F12	22:02:00	Common pipistrelle	1	S	Foraging						multiple pass over hedgerow and wheat at 4m above ground level		Confirmed	
F13	22:05:00	Barbastelle	1	NS	Commuting								Confirmed	
F14	22:05:00	Myotis sp.	1	NS	Commuting								Confirmed	
F15	22:05:00	Common pipistrelle	1	NS	Commuting								Confirmed	
F16	22:15:00	Common pipistrelle	1	NS	Commuting						stop 3 seen flying 4m over field margin and wheat, flying se direction			
F17	22:37:00	Nyctalus sp.	1	NS	Commuting						1 pass			

Data could only be downloaded for first hour

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number		Track no.	Track time	Notes	Sound analysis result
F18	22:39:00	Nyctalus sp.	1	NS	Commuting					possible leister	
F19	22:41:00	Noctule	1	NS	Commuting						
F20	22:41:00	Common pipistrelle	1	NS	Commuting						
F21	22:42:00	Common pipistrelle	1	NS	Commuting					stop 5	
F22	22:43:00	Nyctalus sp.	1	NS	Commuting					possible leister stop 5	
F23	22:44:00	Myotis sp.	1	S	Commuting					Stop 5 bat seen flying along hedgerow at 3m above field margin towards the north	
F24	22:46:00	Serotine	1	NS	Commuting						
F25	22:48:00	Serotine	1	NS	Commuting					multiple passes for 2 mins	
F26	22:51:00	Common pipistrelle	1	NS	Commuting						
F27	22:55:00	Noctule	1	NS	Commuting					6 stop	
F28	22:56:00	Serotine	1	NS	Commuting					6 stop	
F29	23:14:00	Noctule	1	NS	Commuting						
F30	23:16:00	Common pipistrelle	1	NS	Commuting						
F31	23:18:00	Common pipistrelle	1	NS	Commuting						
F32	23:30:00	Common pipistrelle	1	NS	Commuting						
F33	23:20:00	Long-eared bat	1	NS	Commuting						
F34	23:21:00	Noctule	1	NS	Commuting						
F35	23:34:00	Common pipistrelle	1	S	Foraging					3 passes, bat seen under tree canopy at 4m above wheat field and circling	
F36	23:37:00	Noctule	1	NS	Commuting						
F37	23:42:00	Noctule	1	NS	Commuting					stop 9	
F38	23:53:00	Common pipistrelle	1	NS	Commuting						
F39	00:10:00	Common pipistrelle	1	NS	Commuting					stop 10	

BA1-BA4 BAT ACTIVITY SURVEY												
Ecology ID		Land Parcel Reference	13			Surveyor(s)	DL TW		BA1: Bat - Activity (transect)	Date		03/08/2020
Survey Start (24 hours)	20:55	Survey End (24 hours)	23:42	Sunset		Sunrise	20:55	Detector / recording device type	D4 batlogger			
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)				
WEATHER CONDITIONS												
Air Temperature (°C)	14	Wind		Cloud Cover	1	Rain	10%	Weather Conditions (Description)	0			
OBSERVATIONS												
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number	Track no.	Track time	Notes	Sound analysis result		
F	21:11:00	Noctule	4	S					High heading east.	Confirmed		
F2	21:12:00	Noctule	2	S					High heading north-east	Confirmed		
F3	21:23:00	Common pipistrelle	1	S	Foraging				Foraging in road outside farm	Confirmed		
F4	21:26:00	Common pipistrelle	1	S	Foraging				Campsite until 21:27	Confirmed		
F5	21:29:00	Serotine	1	S	Foraging				In campsite field	Confirmed		
F6	21:30:00	Common pipistrelle	1	S	Foraging				Woodland edge/field corner before stop 2 (until 21:32)	Confirmed		
F7	21:35:00	Soprano pipistrelle	1	S	Foraging	2				Confirmed		
F8	21:37:00	Common pipistrelle	1	S	Foraging				Just after stop 2, woodland edge	Confirmed		
F9	21:41:00	Lesser Horseshoe	1	NS						Found in Analysis		
F10	21:43:00	Common pipistrelle	1	S		3			Just before and at stop 3, woodland edge	Confirmed		
F11	21:49:00	Barbastelle	1	NS						Found in Analysis		
F12	21:53:00	Barbastelle	1	S						Confirmed		
F13	21:56:00	Common pipistrelle	1	NS	Foraging	4			to 21:59	Confirmed		
F14	21:57:00	Soprano pipistrelle	1	NS	Foraging	4				Confirmed		
F15	21:58:00	Barbastelle	1	NS		4				Confirmed		
F16	22:01:00	Soprano pipistrelle	1	NS						Confirmed		

Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C = Commuting; S = Socialising)	point count number	Track no.	Track time	Notes	Sound analysis result
F17	22:04:00	Pipistrelle sp.	1	NS						Confirmed
F18	22:07:00	Common pipistrelle	1	NS						Confirmed
F19	22:09:00	Common pipistrelle	1	NS		5			to 22:11	Confirmed
F20	22:09:00	Soprano pipistrelle	1	NS		5				Confirmed
F21	22:17:00	Barbastelle	1	NS		6				Confirmed
F22	22:20:00	Lesser Horseshoe	1	NS		6				Confirmed
F23	22:29:00	Myotis sp.	1	NS						Confirmed
F24	22:33:00	Leisler's bat	1	NS						Confirmed
F25	22:33:00	Noctule	1	NS						Confirmed
F26	22:35:00	Common pipistrelle	1	NS					Around campsite	Confirmed
F27	22:57:00	Myotis sp.	1	NS						Confirmed
F28	23:05:00	Leisler's bat	1	NS						Confirmed
F29	23:17:00	Common pipistrelle	1	NS						Confirmed
F30	23:20:00	Soprano pipistrelle	1	NS						Confirmed
F31	23:21:00	Common pipistrelle	1	NS						Confirmed
F32	23:21:00	Soprano pipistrelle	1	NS	Socialising				until 23:39, in road from scout hut	Confirmed
F33	23:23:00	Common pipistrelle	1	NS					Along road from scout hut	Confirmed
F34	23:30:00	Serotine	1	NS						Confirmed
F35	23:30:00	Common pipistrelle	1	NS						Confirmed

BA1-BA4 BAT ACTIVITY SURVEY														
Ecology ID		Land Parcel Reference			T12			Surveyor(s)	TJ TP	BA1: Bat - Activity (transect)			Date	08/09/2020
Survey Start (24 hours)	19:42	Survey End (24 hours)		22:42	Sunset	19:42	Sunrise		Detector / recording device type	Anabat Walkabout 5				
Transect ID	12	Transect start Eastings (X)		Transect start Northings (Y)		Transect end Eastings (X)		Transect end Northings (Y)						
WEATHER CONDITIONS														
Air Temperature (°C)	14	Wind		1	Cloud Cover	10%	Rain	0	Weather Conditions (Description)	standard september evening weather, very little cloud				
OBSERVATIONS														
Observation no. (align with map)	Time (24 hours)	Species	No. of bats	Seen (S) / Not Seen (NS)	Activity type (E = Emergent; R = Returning to roost; F = Foraging; C =				point count number	Track no.	Track time	Notes	Sound analysis result	
F1	19:47:00	Long-eared bat	1	NS	Unknown				1			Added during analysis - brief.	Found in Analysis	
	20:11:00	Barbastelle	1	NS	Unknown				1				Confirmed	
F2	20:17:00	Barbastelle	1	NS	Unknown								Confirmed	
F3	20:19:00	Soprano pipistrelle	2	S	Commuting				2				Confirmed	
F4	20:21:00	Soprano pipistrelle	1	S	Foraging							Continues until 20:23	Confirmed	
	20:27:00	Noctule	1	NS	Unknown							Added during analysis.	Found in Analysis	
F5	20:29:00	Nyctaloid	1	NS	Unknown				2			Amended from noctule to nyctaloid.	Amended	
F6	20:31:00	Barbastelle	1	NS	Unknown				3			point count 3	Confirmed	
	20:33:00	Barbastelle	1	NS	Unknown				3			Added during analysis - point count 3.	Found in Analysis	
F7	20:33:00	Noctule	1	NS	Unknown				3			point count 3	Confirmed	
	20:35:00	Common pipistrelle	1	NS	Unknown							Added during analysis.	Found in Analysis	
	20:36:00	Nyctaloid	1	NS	Unknown							Added during analysis.	Found in Analysis	
F9	20:50:00	Common pipistrelle	1	NS	Unknown				4			point count 4 - continues until 20:51.	Confirmed	
F10	20:50:00	Soprano pipistrelle	1	NS	Unknown				4			point count 4	Confirmed	
F11	20:53:00	Noctule	1	NS	Unknown				4				Confirmed	
F12	20:59:00	Barbastelle	1	NS	Unknown				4			point count 5	Confirmed	