REPORT

Holyhead Waterfront Development

Technical Report: Bat Survey

Client: Conygar (Wales) PLC

Reference: PB8908-RHD-ZZ-XX-RP-Z-0008

Status: Final/P01.01

Date: 29 October 2019

Royal HaskoningDHV

Enhancing Society Together

HASKONINGDHV UK LTD.

Honeycomb
Edmund Street
Liverpool
L3 9NG
United Kingdom
Industry & Buildings
VAT registration number: 792428892

+44 151 2362944 **T**
+44 151 2272561 **F**
info.liv@gb.rhdhv.com **E**
royalhaskoningdhv.com **W**

Document title:	Holyhead Waterfront Development
Document short title:	Technical Report: Bat survey
Reference:	PB8908-RHD-ZZ-XX-RP-Z-0008
Status:	P01.01/Final
Date:	29 October 2019
Project name:	Holyhead Waterfront Development
Project number:	PB8908
Author(s):	Ben Hughes

Drafted by:	Ben Hughes
Checked by:	Claire Smith
Date / initials:	29/10/2019 CS
Approved by:	Gregor McNiven
Date / initials:	31/10/2019 GMcN

Classification
Project related

Disclaimer

No part of these specifications/printed matter may be reproduced and/or published by print, photocopy, microfilm or by any other means, without the prior written permission of HaskoningDHV UK Ltd.; nor may they be used, without such permission, for any purposes other than that for which they were produced. HaskoningDHV UK Ltd. accepts no responsibility or liability for these specifications/printed matter to any party other than the persons by whom it was commissioned and as concluded under that Appointment. The integrated QHSE management system of HaskoningDHV UK Ltd. has been certified in accordance with ISO 9001:2015, ISO 14001:2015 and ISO 45001:2018.

Royal HaskoningDHV

Table of Contents

Table of Tables

Table of Figures

Appendices

1 Introduction

1.1 Project Background

Conygar (Wales) PLC ("Conygar") are seeking to develop Holyhead Waterfront in order to stimulate economic activity in the Holyhead area and reverse a decline in footfall. The development is a mixed-use regeneration scheme ("the Waterfront Development") which would include a new marina, the reclamation of land from the sea, new residential development, together with a hotel, commercial, leisure and retail uses and associated infrastructure.

Outline Planning Permission for the Waterfront Development has previously been granted by the Isle of Anglesey County Council (Application 19C1046A/EIA/ECON). Conygar are seeking to submit a Section 73 application for an extension of the life of the Outline Planning Permission in order to submit the reserved matters. To support the Section 73 application, the Holyhead Waterfront Regeneration Scheme Environmental Statement ("the 2010 ES") (Axis, 2010) has been updated to reflect new legislation and baseline information. The updated ES (and this report) accompanies the Section 73 application.

A bat survey was undertaken in 2009 ("the 2009 bat survey") as part of the initial application for the Outline Planning Permission; however, due to the time elapsed, an updated suite of bat surveys to understand the level of bat activity and usage of potential roosting habitats within the proposed development area has been undertaken to support and inform the updated ES.

An updated bat survey was commissioned in 2019 ("the 2019 bat survey") to review the validity of the 2009 survey results and identify any changes to the level of bat activity and supporting habitat within the proposed development area since 2009. The scope of the 2019 bat survey was informed by the findings of the updated Extended Phase 1 Habitat Survey (the "2019 Phase 1 survey") that was undertaken in July 2019.

The main objectives of the 2019 bat survey were:

- To validate the 2009 bat survey findings with regards to the level of commuting/foraging bats using the proposed development area, in light of any changes in habitat extent and/or type that had been recorded during the 2019 Phase 1 survey to ascertain an up-to-date understanding of the potential for the development area to provide opportunities for feeding, commuting and roosting bats;
- To confirm the presence and/or likely absence of roosting bats from the structures (i.e. buildings, trees) within the proposed development area that had been assessed as providing suitability for roosting bats;
- To identify any potential impacts from activities associated with the Waterfront Development on bat species, drawing on the findings of the 2019 surveys; and,
- To ensure that the mitigation measures identified following the 2009 bat survey remain relevant and applicable, ensuring any additional mitigation measures that may be required in light of the 2019 survey results are also identified.

The proposed development area is denoted by the solid red line in

Figure 1. The terrestrial extent of the proposed development area stretches along the coast from the ferry terminal to the Great Breakwater, and the inland perimeter is delineated by Beach Road and the Breakwater Country Park access road.

1.2 Purpose of this Report

A suite of bat surveys, comprising emergence/re-entry and monthly activity transect surveys, were undertaken between July and October 2019. This report, which forms an appendix to the updated ES, describes the methodology and results of these surveys, and in turn informing the identification of the potential impacts from the development on the bat species recorded as using the proposed development area. Mitigation measures to safeguard bats during construction activities have also been identified where required. This report has been produced in accordance with recognised guidelines from The Bat Conservation Trust (Collins (ed.), 2016).

1.3 Legislation and policy context

All UK bat species are European Protected Species (EPS) and are therefore protected under The Conservation of Habitats and Species Regulations 2017 and the Wildlife and Countryside Act 1981 (as amended). As such, it is prohibited to:

- Deliberately capture, injure or kill any wild bat;
- Possess or control any live or dead specimens, or anything derived from bat species;
- Deliberately disturb wild bats, where the disturbance is likely to impair their ability to survive, breed, reproduce, rear young or hibernate;
- Intentionally, deliberately or recklessly damage or destroy the breeding or roosting place of bats; and,
- Sell or exchange bats (alive or dead).

If activities related to the Waterfront Development are likely to contravene any of the above, a European Protected Species Licence (EPSL) would be required from Natural Resources Wales (NRW) before such activities could take place. For an EPSL to be issued, NRW would need to be satisfied that the development activities:

- would not be detrimental to the maintenance of the bat populations at a favourable conservation status in their natural range;
- would offer significant economic, conservation, scientific or social benefits; and,
- have no satisfactory alternatives.

Several species of bat are listed as species of principle importance for the purpose of maintaining and enhancing biodiversity in relation to Wales, under Section 7 of the Environment (Wales) Act 2016. Such species include barbastelle bat (*Barbastella barbastellus*), Bechstein's bat (*Myotis bechsteinii*), noctule (*Nyctalus noctule*), common and soprano pipistrelle (*Pipistrellus pipistrellus* and *P. pygmaeus*), brown long-eared bat (*Plecotus auratis*) and greater and lesser horseshoe bat (*Rhinolophus ferrumequinum* and *R. hipposideros*).

In addition to the legislation outlined above, the Isle of Anglesey Local Biodiversity Action Plan ("the Anglesey BAP") resulted in the production of Species Action Plans (SAPs) for *Pipistrellus* bats, noctule and lesser horseshoe bat. The SAPs outline conservation objectives for each species within the local area, with current and future actions to achieve such objectives. Objectives vary from species to species; for lesser

horseshoe bat the objective is to maintain identified roost sites and safeguard newly located ones, and for the other species the objectives focus on maintenance of existing populations and prevention of decline.

2 Existing Information

2.1 Desk Study Results

A desk-based review of biological data from the Local Environmental Records Centre for North Wales ("Cofnod") was undertaken in July 2019. The National Biodiversity Network (NBN) Atlas indicates that there are 15 records of bats within 2km of the Waterfront Development, of which nine have been recorded since the 2010 ES was produced. None of the records were located within the proposed development area.

Bat species that have been recorded within a 2km buffer from the proposed development area include:

- Common pipistrelle;
- Soprano pipistrelle;
- Lesser noctule (*Nyctalus leisleri*);
- Brown long-eared bat; and,
- *Myotis* sp.

Of the species recorded either within or close to the proposed development area, soprano pipistrelle has shown a significant decreasing trend in population size in Wales between 2002 and 2018, according to the National Bat Monitoring Programme (NBMP). It should be noted, however, that determination of this trend has been based on roost counts, which are not considered a reliable measure of population change for this species (Bat Conservation Trust, 2019). Brown long-eared bat populations have shown an increasing trend in Wales. There is a lack of information on Welsh trends in common pipistrelle and lesser noctule bat populations, though the population of the former across Great Britain has increased since 1999.

Interrogation of the Cofnod data identified that, while the proposed development area lies within 2km of Glannau Ynys Gybi / Holy Island Coast Special Area of Conservation (SAC) / Site of Special Scientific Interest (SSSI) and Tre Wilmot SSSI, none are designated for the protection of bat species.

2.2 Previous Survey Results

The 2009 bat survey was undertaken in July and August 2009 (Argus Ecology, 2009) to support the outline planning application. The 2009 survey comprised of a preliminary daytime inspection on the 15th July 2009 followed by an evening activity transect survey on the 15th July 2009 and two separate emergence surveys on the 11th and 12th August 2009 focusing on two large derelict buildings in the proposed development area (Porth-y-Felin House and Soldier's Point House).

The preliminary daytime inspection assessed the bat roosting potential of Porth-y-Felin House and Soldier's Point House and trees within the grounds of the two buildings. It was concluded that both of the buildings and grounds provided low roosting potential for bats. The evening emergence surveys recorded no evidence of bats emerging from these buildings and therefore no confirmed bat roost was present. Foraging common and soprano pipistrelles and a *Myotis* sp. bat were recorded in the grounds of Soldier's Point and along the lane that runs immediately adjacent to the grounds of Porth-y-Felin House and Soldier's Point House.

The 2009 bat survey concluded the absence of roosting bats from the proposed development area and low levels of foraging activity around the buildings. However, features such as the lane provided some value, albeit limited, to foraging bat species. The lane itself was identified as a corridor for the movement of bats (Argus Ecology, 2009).

3 2019 Field Survey Methodology

3.1 Survey area

During the 2019 Phase 1 survey, an updated preliminary daytime inspection of potential roosting sites across the proposed development area was undertaken. Three potential sites were identified, indicated as points **1**, **2** and **3** on

Figure 2. These three locations are all within the western half of the proposed development area and included Porth-y-Felin House (**1**), Soldier's Point House (**2**) and the underside of an old bridge over a pathway (**3**). Within the western half, the habitat is a mix of broad-leaved woodland, scrub and grassland, which offers good foraging opportunities. As such, the western half of the proposed development area, extending between the old bridge and the Great Breakwater, formed the 2019 bat survey area, as shown in

Figure 3.

During the 2019 Phase 1 survey, no potential roosting sites were identified in the eastern half of the proposed development area, adjacent to Newry Beach and the marina, and the habitat present in this section (largely amenity grassland, semi-improved grassland and built-up area) was assessed as being sub-optimal for foraging bats. The eastern half was therefore not subject to any further surveys during the 2019 bat survey effort.

3.2 Activity Transect Surveys

Monthly bat activity transects were undertaken between July and October 2019 (inclusive) to assess the current level of bat activity around the site and identify species assemblage and notable foraging areas. These surveys were undertaken in accordance with industry guidance as set out in the BCT guidance (Collins (ed.), 2016). All of the transect surveys were undertaken in optimal weather conditions for the detection of bat activity (i.e. sunset temperatures above 10°C, no rain or strong wind). **Table 3.1** below provides details of the four bat activity transect survey visits.

Table 3.1: Details of the bat activity transects, July to September 2019

Date	Sunset	Transect start time	Transect end time	Temperature at sunset	Conditions
4th July 2019	21:48	21:30	23:30	15°C	Clear, wind 2 – 3mph SSW
28th August 2019	20:18	19:48	22:15	16°C	Clear, breezy, wind 20 – 25mph SSW
19th September 2019	19:25	19:17	20:47	17°C	Clear, wind 6 – 7mph SSW
2nd October 2019	18:54	18:44	20:39	12°C	Clear, wind 1 – 3mph NE

The transect route incorporated all of the potential roost sites indicated in **Section 3.1;** it started from the old bridge and followed the lane past Porth-y-Felin House and Soldier's Point House, terminating at the Great Breakwater (

Figure 3). During each transect visit, two surveyors walked at a constant pace along the length of the transect at least twice, during which time any passes by bats were recorded with the aid of handheld acoustic detectors (Batbox Duet). Time, species and behaviour (i.e. whether an individual was commuting or foraging) was noted for each pass.

3.3 Emergence and Re-entry Survey

During the 2019 Phase 1 survey, both Porth-y-Felin House and Soldiers Point House were assessed as providing moderate suitability for roosting bats. In line with guidance from Collins *et al.* (2016), two separate survey visits were undertaken to determine whether these structures were used by roosting bats; an evening emergence survey on 28th August 2019 and a dawn re-entry survey on 20th September 2019. The emergence survey was commenced approximately 15 minutes before sunset and continued until approximately two hours after sunset; the dawn survey was commenced approximately 2 hours before sunrise and continued until approximately 15 minutes after sunrise. **Table 3.2** below provides detail of the emergence and re-entry survey visits.

Table 3.2: Details of evening emergence and dawn re-entry bat surveys, August and September 2019

Survey type	Date	Sunset / sunrise	Start time	End time	Temperature	Conditions
Evening emergence	28th August 2019	20:18	20:00	22:15	16ºC	Clear, breezy, wind 20 – 25mph SSW
Dawn re-entry	20th September 2019	07:00	05:00	07:15	10ºC	Clear, wind 6 – 7mph ENE

The emergence and re-entry surveys were undertaken by two surveyors stationed outside Porth-y-Felin House and Soldier's Point House. Any evidence of bats emerging from, or re-entering, the two buildings was recorded and any other notable bat activity around the buildings (such as foraging or commuting behaviour) was also recorded, with the aid of handheld acoustic detectors (Batbox duet).

3.4 Static Detector Survey

To increase the likelihood of acoustically detecting species with lower population densities or more directional echolocation calls, two SM2 static detectors were deployed on the 28th August 2019 and programmed to record any bat passes over a continuous period. One was positioned in the grounds of Porth-y-Felin House and one in the grounds of Soldier's Point (exact locations are shown in

Figure 3). The static detector microphones were positioned at head height and away from constant sources of background noise. After the detectors were removed from site on the 10th September 2019, the recorded sonograms were inspected to ascertain the number and species of bats that had passed the detector during the recording period.

4 2019 Field Survey Results

4.1 Activity Transect Surveys

During the four activity transect visits that were undertaken, there was a total of 28 acoustic records of bats using and passing through the survey area. The key species comprised solely of common and soprano pipistrelle. Common pipistrelle was present on all transects, whilst soprano pipistrelles were only recorded passing during the August, September and October transects. Overall, there were 23 recorded passes by common pipistrelle and five recorded passes by soprano pipistrelle.

On the first activity transect visit, the first bat recorded was a common pipistrelle, which was commuting above the lane at 22:23. Further common pipistrelles were observed foraging along the lane and over pastures to the west of the lane. On the second visit, the first bat observed was a foraging common pipistrelle at 20:53, with further sightings of foraging and commuting common and soprano pipistrelles. On the third visit, the first bat observed was a soprano pipistrelle commuting along the lane near to Soldier's Point at 20:08, with all other sightings being of common pipistrelle. On the final visit, the first bat observed was a soprano pipistrelle commuting along the lane near to Soldier's Point at 19:39, with further sightings of foraging and commuting pipistrelles along the lane near to Soldier's Point and within the small area of broadleaved woodland just south of Porth-y-Felin House.

Overall, during the transects most bats that were visually observed were noted foraging or commuting along the lane running adjacent to the buildings, with some foraging activity over pastures and scrubland to the west of the lane. A full list of the bats recorded during the activity transects is provided in **Appendix 0**.

4.2 Emergence / Re-entry Survey

During the emergence survey on the evening of the 28th August 2019 and the re-entry survey on the morning of the 20th September 2019, no bats were observed emerging from or re-entering Soldier's Point House or Porth-y-Felin House. Common and soprano pipistrelles were active on the evening and morning of the respective surveys but were recorded and observed to be foraging and commuting within and around these two buildings. No evidence to indicate they were roosting within the buildings was noted.

Sunset during the emergence survey was at 20:18, and the first bat was recorded at 20:53, near to Porth-y-Felin House. Sunrise on the morning of the emergence survey was at 07:00, and the final bat recording was at 06:18, near to Soldier's Point. When visually observed, bats appeared to be using the lane to the west of the buildings as primary foraging areas and were not extensively active within the grounds of the buildings.

4.3 Static Detector Survey

The static bat detector at Soldier's Point recorded passes on two non-consecutive nights (the night of the 29th / 30th August and the night of the 31st August / 1st September 2019). Sunset on the two evenings was at 20:16 and 20:11, respectively. During the two nights a total of seven passes were recorded, with one

pass by a noctule on the 30th August at approximately 03:30 and six passes by common pipistrelle on the 31st August, all between 21:05 and 21:15.

The static detector at Porth-y-Felin recorded a total of 21 passes across two non-consecutive nights, including 12 on the first night and nine on the second. An error with the detector meant that the exact dates could not be determined; however, on both nights the majority of bat activity was detected between approximately 20:15 and 22:00, with five passes detected in the early hours of the morning. Most echolocation calls recorded were from passing soprano pipistrelles. The full data output from the detectors is provided in **Appendix A2**.

5 Evaluation

5.1 Conclusions

The 2019 bat survey indicates that *Pipistrellus* bats are the predominant species that use the survey area, with very limited use of the area by any other species. Both of the *Pipistrellus* bat species are EPS but are also of local importance, as they are subject of an SAP in the Anglesey BAP. The BAP objectives for these species is to *"conserve existing populations and prevent decline".*

The results of the 2019 bat survey are similar to those obtained during the 2009 survey effort, in that the species assemblage is dominated by *Pipistrellus* species, but with no evidence of roosting bats within the two structures subject to the surveys. As such, the conclusions from the 2009 study remain valid, in that the proposed development area is considered of no value for roosting bat species.

Bats that were recorded within the survey area during the 2019 survey were either foraging within the area or commuting through and, for the most part, bats that were visually observed were noted to be using the sunken lane that runs adjacent to Porth-y-Felin and Soldier's Point as a foraging and commuting "corridor". This reflects the observations noted during the 2009 survey, which concluded that the area provided some, albeit limited, value to foraging and commuting bats, particularly along the lane.

The number of bat passes recorded from the three survey techniques during the 2019 bat survey suggests that bat population densities using the survey area were low, which was also inferred from the 2009 study. As such, and despite the fact that *Pipistrellus* bats are protected by national and international legislation as well as being the subject of an SAP in the Anglesey BAP, the proposed development area is considered to be of low importance for foraging bats.

Given the above, it is not anticipated that an EPSL would be required for any elements of the Waterfront Development, although to help achieve the SAP objective of conserving local bat populations and preventing population decline, mitigation measures should be considered in the development design, as discussed in **Section 7**.

5.2 Survey Limitations

As far as was practical, the methodologies employed during the 2019 bat survey effort were undertaken in accordance with the guidance set out in the Bat Conservation Trust's survey guidelines (Collins (ed.), 2016). All of the 2019 bat survey visits were undertaken within optimal weather conditions; for example, an unproductive survey that yielded no bat observations on a wet and windy evening in October was followed up by a successful survey the following evening when conditions were more favourable.

Given the above, it is considered that there were no major limitations to the survey methodology or result analysis that could significantly reduce the credibility of the conclusions drawn from the survey.

Since surveyors could only be in one place at a time during activity transects, it is possible that some bat activity may have been missed and/or not fully recorded. However, and to minimise this, each survey transect was walked at least twice during each visit. Particularly with foraging bats, it is considered likely that repeated walks of the transect route provides a sufficient level of confidence in being able to identify the overarching foraging patterns within the survey area.

It is worth noting that identification of bat species from echolocation call analysis alone is not a definitive guide to species present. It is known that both *Pipistrellus* bats do vary their echolocation calls and therefore the species determination should be treated with a degree of caution. However, based on the low densities of bat populations recorded in the survey a small degree of misidentification would not significantly alter the conclusions that could be drawn.

It can be difficult to accurately determine population density from acoustic recordings (i.e. during activity transects and using the static detectors) since without visual confirmation it can be difficult to assess whether recordings represent a number of bats passing the detector once or a single bat passing the detector a number of times. However, even if the counts represented a number of bats passing just once or twice – which would be very unlikely – the number of passes would still suggest that population densities are low and the conclusions remain valid.

An error with the Porth-y-Felin static detector meant that specific dates of bat passes were not recorded. However, since the detectors were only in place for a period of approximately 2 weeks an approximation of the date could be inferred. Given the small time window in which the passes could have occurred, it would not be expected to alter the conclusion of the survey.

6 Impact Assessment

The outcome of the 2019 bat survey supports the conclusions of the 2009 bat survey and, as such, the impact assessment in absence of mitigation outlined in the 2010 ES is considered to remain valid. Potential impacts include:

- Limited, short-term disturbance to foraging patterns of bats during construction activities;
- Disruption of commuting and foraging routes through the loss of the sunken lane and associated hedgerows;
- Displacement of foraging bats due to a more formal landscape and loss of tree cover; and,
- Interference from increased lighting and human activity.

However, given that the foraging bat numbers recorded in both the 2009 and 2019 surveys are relatively low and the proposed development area is not considered to support roosting bats, the potential impacts listed above are not expected to be significant, even at a local level. There is likely to be minor displacement of bats during construction activities, and during operation the introduction of additional lighting and built up area may also lead to displacement, but there are other areas in close proximity, though outside of, the proposed development area that can support displaced individuals. The greatest impact, based on the activities recorded at the site, is likely to be the loss of the lane, as this feature appears to be the focal point for foraging and commuting activity. However, with appropriate mitigation (see **Section 7**), this impact can be minimised.

7 Required Actions

The findings from the 2019 bat survey reaffirms the conclusion of the 2009 survey that, even in the absence of mitigation, there is unlikely to be any significant impact on bats as a result of the Waterfront Development, particularly as there is no evidence of roosting bats within the site. The site is used regularly by foraging *Pipistrellus* bats, which are an EPS and are protected by the Wildlife and Countryside Act 1981 (as amended), though the low-density populations suggested by both the 2009 and 2019 survey indicate that the area is of low importance for bats, even at a local scale.

Although it is unlikely that the construction and operational phases of the Waterfront Development would result in any contravention of bat legislation, it is considered that the measures to mitigate the loss of foraging habitat described in the 2010 ES remain applicable. Specifically, this entails sympathetic landscape design in the Waterfront Development; for example, the maintenance of woody vegetation along the sides of the Breakwater Country Park access road where it fringes the development. Such a design would provide a suitable alternative habitat for foraging bats to mitigate for the loss of connectivity along the sunken lane that runs past Porth-y-Felin House and Soldier's Point.

While all of the evidence from the 2019 bat survey supports the previous understanding that there are no roosting sites within the proposed development area, a working brief for contractors should stipulate that, in the event of roosting bats being located within structures during the construction phase of the Waterfront Development, a trained ecologist should be consulted immediately and any activity that may disturb roosting bats should cease.

8 References

Bat Conservation Trust (2019). The National Bat Monitoring Programme Annual Report 2018. Bat Conservation Trust, London. Available at URL: http://www.bats.org.uk/pages/nbmp_annual_report.html.

Collins, J. (ed.) (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd edition). Bat Conservation Trust, London. ISBN-13 978-1-872745-96-1.

9 Figures

Figure 1: Holyhead Waterfront Development Area

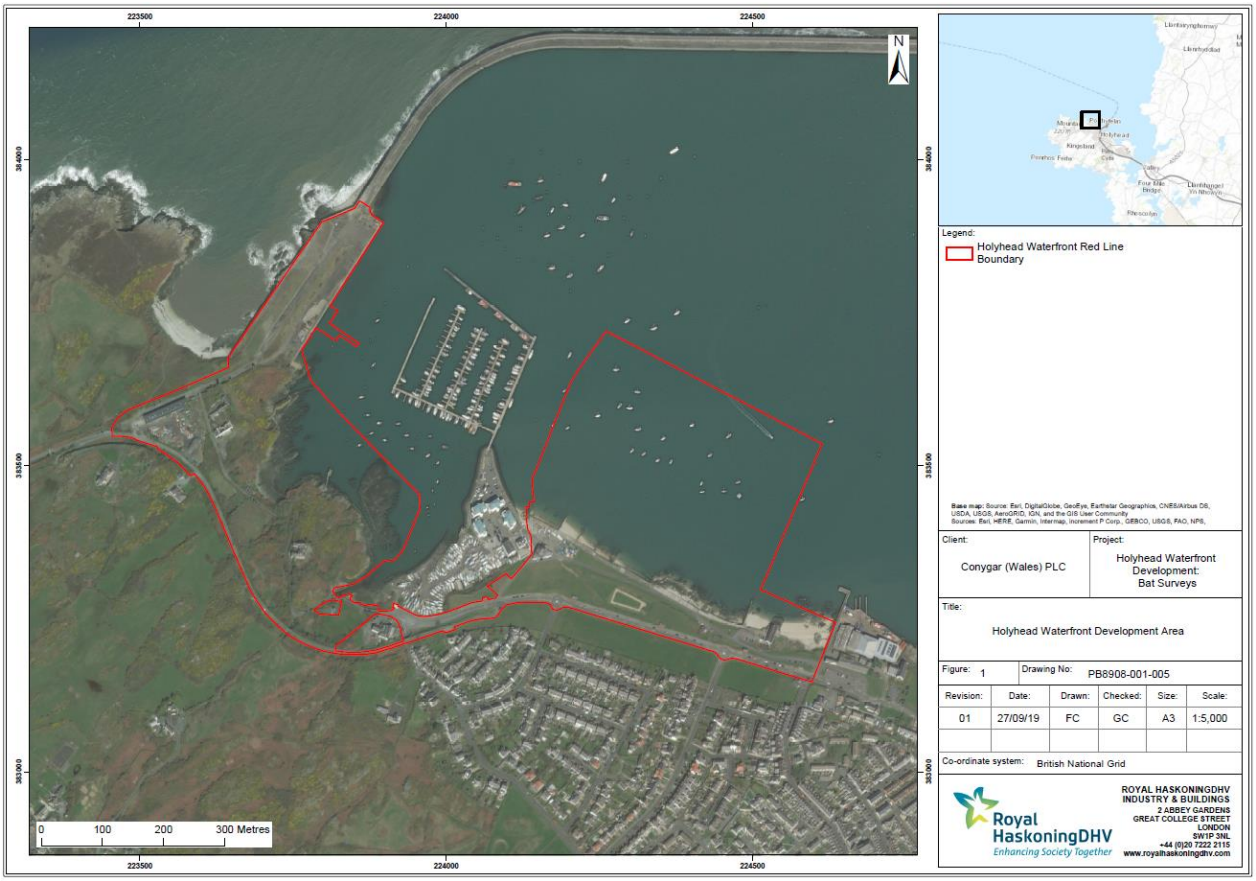


Figure 2: Phase 1 Habitat Map, showing Potential Bat Roosting Sites

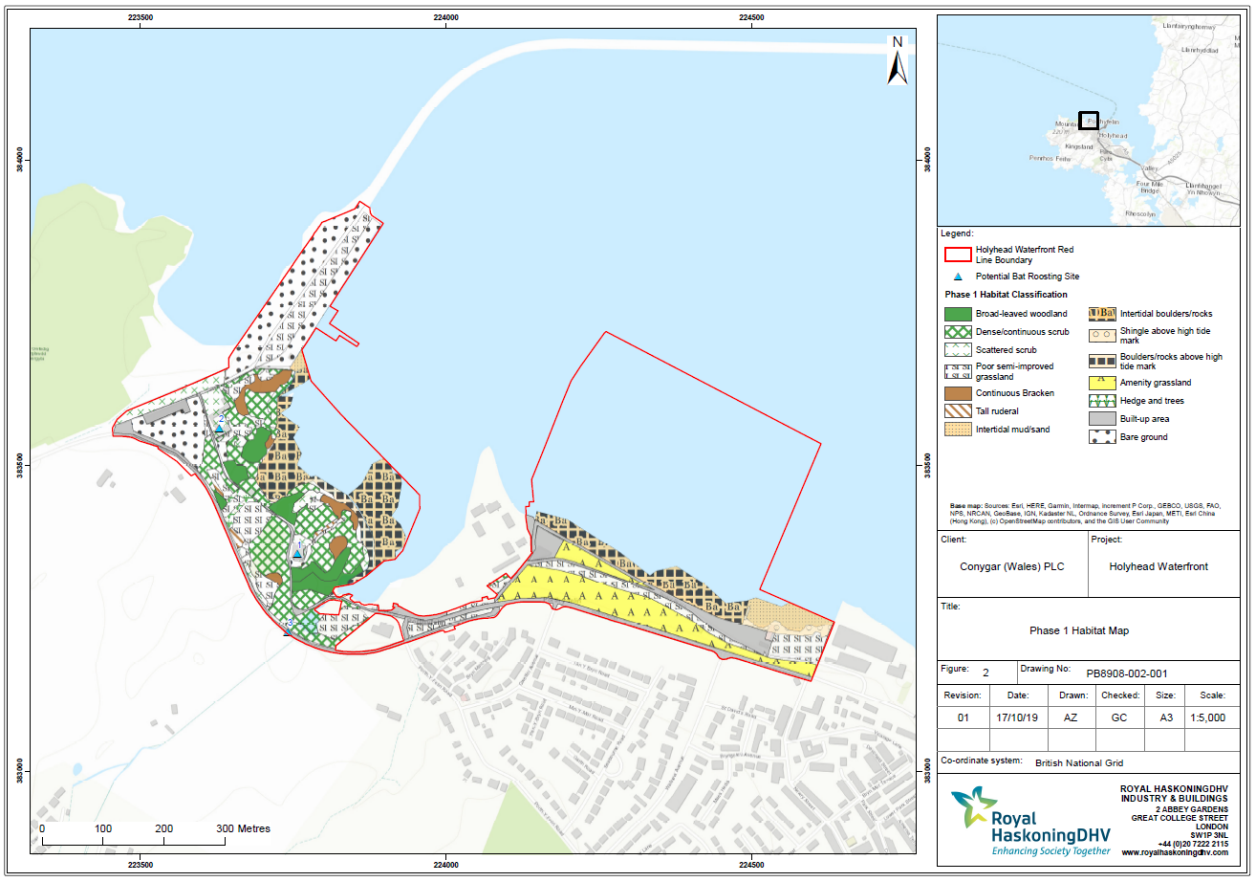
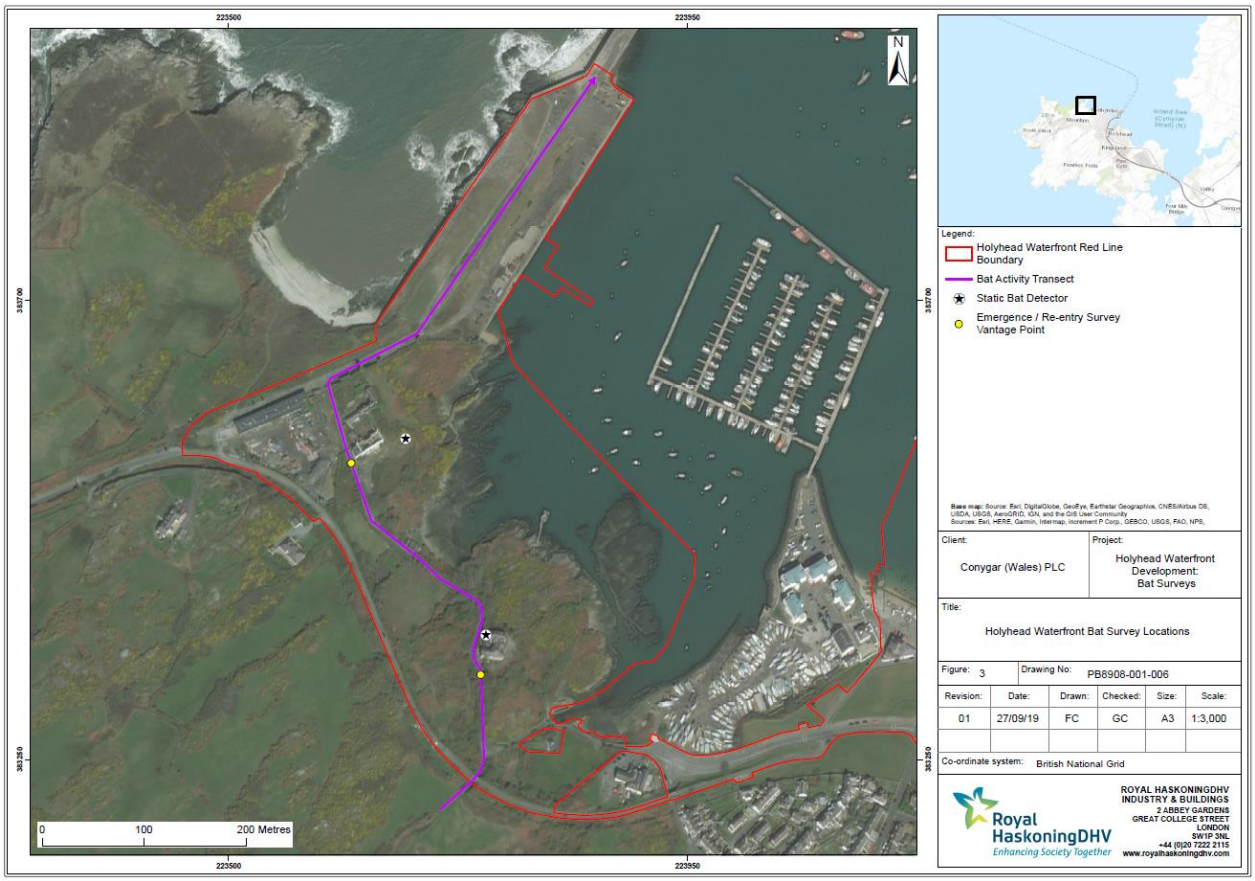


Figure 3: Holyhead Waterfront Bat Survey Locations



A1. Bat activity transect results

Species codes
PIPPIP: common pipistrelle (*Pipistrellus pipistrellus)*
PIPPYG: soprano pipistrelle (*Pipistrellus pygmaeus*)

Date	Sunset	Survey start time	Survey end time	Temperature at sunset ºC	Wind speed mph	Direction	Rainfall mm	Species	Time	Activity
04/07/19	21:48	21:30	23:30	15	2 – 3	SSW	0	PIPPIP	22:23	Commuting
								PIPPIP	22:31	Foraging
								PIPPIP	22:44	Foraging
								PIPPIP	22:49	Foraging
								PIPPIP	23:11	Foraging
28/08/19	20:18	19:48	22:15	16	20 – 25	SSW	0	PIPPIP	20:53	Commuting
								PIPPYG	20:56	Commuting
								PIPPIP	20:58	Commuting
								PIPPYG	21:02	Foraging
								PIPPIP	21:06	Foraging
								PIPPYG	21:15	Foraging
								PIPPIP	21:22	Foraging
								PIPPIP	21:27	Foraging
19/09/19	19:25	19:17	20:47	17	6 – 7	SSW	0	PIPPYG	20:08	Commuting
								PIPPIP	20:10	Foraging
								PIPPIP	20:14	Foraging
								PIPPIP	20:15	Foraging
								PIPPIP	20:21	Foraging
								PIPPIP	20:24	Commuting

Date	Sunset	Survey start time	Survey end time	Temperature at sunset ºC	Wind speed mph	Direction	Rainfall mm	Species	Time	Activity
								PIPPIP	20:26	Commuting
								PIPPIP	20:31	Commuting
02/10/2019	18:54	18:44	20:39	12	1 – 3	NE	0	PIPPYG	19:39	Commuting
								PIPPIP	19:44	Commuting
								PIPPIP	19:49	Foraging
								PIPPIP	20:10	Commuting
								PIPPIP	20:14	Foraging
								PIPPYG	20:15	Foraging
								PIPPIP	20:27	Foraging

Static detector results

With its headquarters in Amersfoort, The Netherlands, Royal HaskoningDHV is an independent, international project management, engineering and consultancy service provider. Ranking globally in the top 10 of independently owned, nonlisted companies and top 40 overall, the Company's 6,000 staff provide services across the world from more than 100 offices in over 35 countries.

Our connections

Innovation is a collaborative process, which is why Royal HaskoningDHV works in association with clients, project partners, universities, government agencies, NGOs and many other organisations to develop and introduce new ways of living and working to enhance society together, now and in the future.

Memberships

Royal HaskoningDHV is a member of the recognised engineering and environmental bodies in those countries where it has a permanent office base.

All Royal HaskoningDHV consultants, architects and engineers are members of their individual branch organisations in their various countries.

Integrity

Royal HaskoningDHV is the first and only engineering consultancy with ETHIC Intelligence anti-corruption certificate since 2010.

ETHIC Intelligence
CERTIFICATE ANTI-CORRUPTION COMPLIANCE SYSTEM

royalhaskoningdhv.com

Royal HaskoningDHV
Enhancing Society Together