

PRELIMINARY ROOST ASSESSMENT

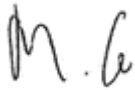
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140 Great Ancoats Street
Manchester
M4 6DU

U R B A N
G R E E N



QUALITY MANAGEMENT

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NON-TECHNICAL EXECUTIVE SUMMARY

Cityside are proposing to develop land at 140 Great Ancoats Street in Manchester (hereafter referred to as 'the site'). The proposals include the demolition of the existing onsite structure and the construction of a residential high rise.

Urban Green have been appointed to complete a Preliminary Roost Assessment (PRA). The assessment found 140 Great Ancoats Street to have **low** potential to support a bat roost. One nocturnal emergence survey was recommended to assess the site for the presence of a bat roost.

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1 Introduction

1.1 Background to the Scheme

Cityside are proposing to develop land at 140 Great Ancoats Street in Manchester (hereafter referred to as 'the site'). The proposals include the demolition of the existing onsite structure and the construction of a residential high rise.

Urban Green have been appointed to undertake a Preliminary Roost Assessment (PRA) of the site.

The author of the report is Max Grindle QCIEEM, Ecologist at Urban Green. Max has experience providing ecological consulting services for a range of development schemes across the UK, including residential, commercial, and industrial schemes.

1.2 Site Context

The site is located at National Grid Reference SJ 85124 98253 and comprises a total area of approximately 0.4ha (see Figure 1).

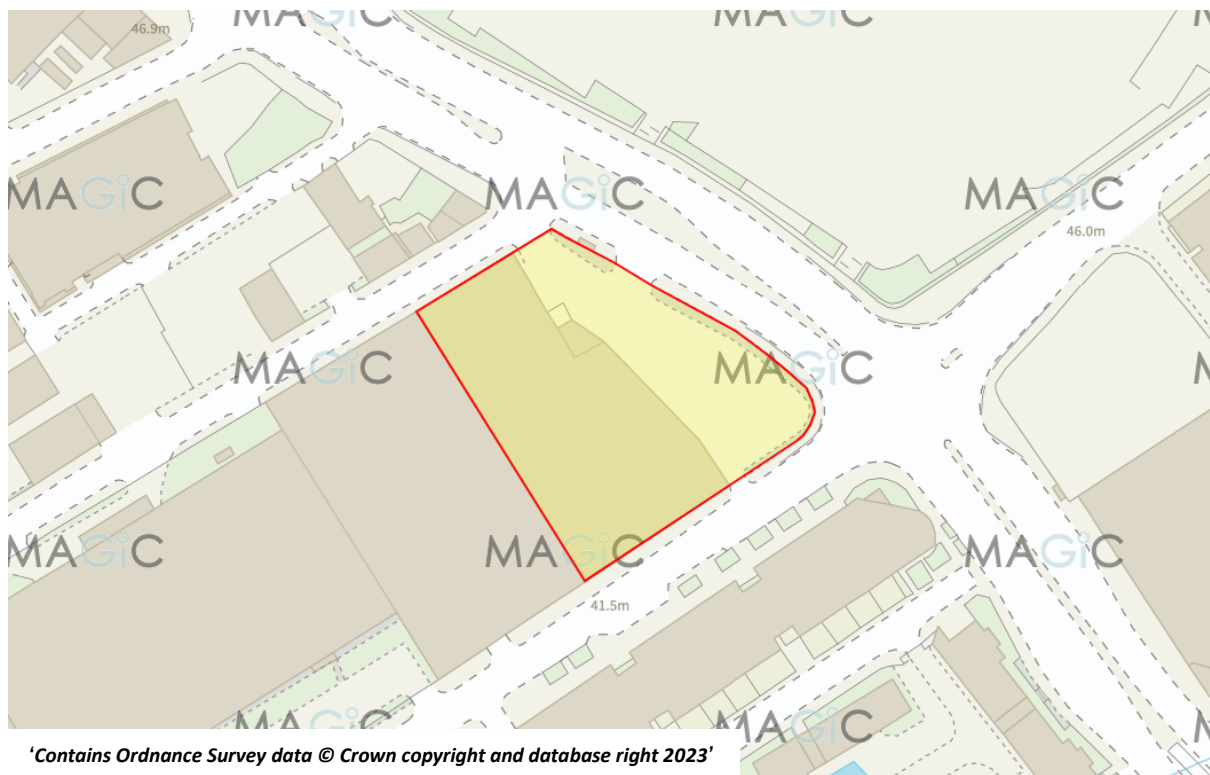


Figure 1 – Site Extent

The site is located within the densely urban zone of Manchester City Centre, bound by the busy dual carriageway of Great Ancoats Street to the northeast and Ducie Street and Store Street to the north and south, respectively. Further commercial properties adjoin the site to the southwest. The site is subject to high levels of anthropogenic disturbance and light pollution at all hours, featuring little connectivity to suitable habitat in the wider environment.

1.3 Purpose of this Report

This report has been produced to document the methods, results and conclusions of a Preliminary Roost Assessment. The objectives of the assessment includes a field survey of the features of interest to assess

its suitability for roosting bats, following guidance set out in Collins (2016). The assessment will determine whether further nocturnal bat surveys are required to confirm likely absence or presence of roosting bats.

Relevant UK legislation of the protection of all UK bats are detailed in Appendix 1.

2 Methods

2.1 Desk Study

Sources of information used in the desk study are presented in Table 1.

Table 1 – Desk Study Sources of Information

Source	Date Consulted	Information Sought
Online aerial imagery	08/08/2023	Review of satellite imagery.
MAGIC website (www.magic.gov.uk)	08/08/2023	Locations of granted EPSL within 5km of the site.

2.2 Preliminary Roost Assessment

A PRA was carried out onsite on 27th July 2023. It was completed by Urban Green Ecologist Max Grindle QCIEEM.

The PRA methodology is based on information contained within the Bat Conservation Trust (BCT) guidelines, 3rd edition (Collins, 2016). The categorisation within this report is based on that set out in Table 2, which is used as a basis for determining the requirement for further surveys.

The site was assessed for the presence of Potential Roosting Features (PRFs) by use of a high-powered torch and close focussing binoculars. An external assessment was undertaken, in which all accessible external spaces were utilised as to observe the site from all possible viewpoints, alongside an internal assessment, in which all accessible loft voids and potential internal access points were assessed for their potential to be utilised by bat species. The internal structure was also assessed for the presence of bat field signs, including droppings and prey remains.

Table 2 – Suitability of Buildings and Trees for Roosting Bats (adapted from Collins, 2016)

Category of Suitability	Typical Characteristics	Further Survey Requirements
High	A structure 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.	A minimum of three separate survey visits. At least one dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September, with at least two surveys between May and August.

Category of Suitability	Typical Characteristics	Further Survey Requirements
Moderate	A structure with one or more potential roost sites that could be used by bats due to their size, shelter, protection, conditions and surrounding habitat but are unlikely to support a roost of high conservation status.	A minimum of two separate survey visits. One dusk emergence and a separate dawn re-entry survey. Surveys can be undertaken between May and September with at least one survey between May and August.
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 condition and/or suitable surrounding habitat to be used on a regular basis by larger numbers of bats.	Structures: a minimum of one emergence/re-entry survey between May and August. Trees: No further survey required but precautionary methods of felling recommended.
Negligible	Negligible habitat features on site likely to be used by roosting bats.	No further work required.

2.3 Constraints to the Survey

Due to the presence of a commercial structure adjoining the southwestern aspect of the site, certain roof aspects, generally southeast facing, were not able to be observed externally. This is not seen as a major constraint as following internal inspection these aspects were discounted due to their unsuitability to support a bat roost.

The conclusions and recommendations detailed in this report are based upon the site redline boundary and the development proposals as outlined by the client at the time of writing. Should there be any changes to the site redline boundary or development proposals at a later stage, this assessment should be reviewed to determine whether any amendments or additional survey work is required.

2.4 Lifespan for Report

In accordance with CIEEM's Advice Note on the Lifespan of Ecological Reports and Surveys (CIEEM, 2019), the details of this report will remain valid for a period of **18 months** from the date of the survey (i.e. until January 2025). After this date, this assessment should be reviewed to determine whether any update surveys are required.

3 Results

3.1 Site Context

The site is located within the densely urban zone of Manchester City Centre, bound by the busy dual carriageway of Great Ancoats Street to the northeast and Ducie Street and Store Street to the north and south, respectively. Further commercial properties adjoin the site to the southwest. The site is subject to high levels of anthropogenic disturbance and light pollution at all hours, featuring little connectivity to suitable habitat in the wider environment.

3.2 Desk Study

3.2.1 Granted EPSL

A total of 37 granted European Protected Species Licenses were returned within 5km of the site, as detailed by MAGIC and described in Appendix 2. All were related to bats, with the closest to site located approximately 300m north and allowing for the destruction of a resting place for common pipistrelle (*Pipistrellus pipistrellus*) in 2020.

3.3 Field Survey

3.3.1 External

The site's external structure featured a complex mosaic of longstanding historic commercial buildings and a large warehouse, all fully adjoined to form a single structure. Two independently pitched rooves, one located along the southern boundary (R1) with the other wrapping around the first (R2), were present atop three storeys, their loft voids accessible internally. The majority of the site comprised long pitched rooves of single layered, corrugated, transparent material, likely plastic, and featured no loft voids, nor any potential to support a roost. Another length of pitched roof was present along the eastern border of the structure (R3), also featuring an accessible loft void. A large warehouse was present at the northwestern corner of the site, which also featured a single layered pitched roof, with no loft void and no suitability for habitation by bats. Figure 2 shows the location of all accessible loft voids.



Figure 2 – Roof locations

The northern & northeastern aspects of the site featured a well-sealed brick exterior with a pitched roof. A large grate was located at each gable end which was noted as a potential entrance into the loft void, however after following internal inspection both grates were found to be closed off (See Section 3.2.2). The roof consisted single layered corrugated material with no potential PRFs following internal inspection. A turret was located at the eastern corner of the roof, also well sealed with no visible PRFs. The area was assessed as featuring negligible potential to support a bat roost.



Picture 1 – Northern aspect



Picture 2 – Northeastern corner aspect

The eastern façade was furthermore well sealed across its extent, featuring as a gable end for multiple pitched rooves across the site. This area was generally single storey, with one area (R3) raising up a second story and featuring a loft void. No PRFs were identified across the extent.



Picture 3 – Eastern aspect & shutter gate



Picture 4 – Eastern aspect & pitched roof



Picture 5 – Eastern aspect



Picture 6 – Southeastern corner aspect

The southern aspect of the site was the most complex, featuring two pitched rooves with hipped ends and slate tiling, one roof partially encircling the other. Although all the tiling was observed well sealed, on the southern extent one hip cover was almost entirely removed, leaving large gaps into cavities between the tiling and inner roof insulation along its extent and serving as a large suitable PRF. Along the northern extent of these rooftops a dilapidated dormer was present, featuring a grate which served as a suitable PRF.



Picture 7 – Southern extent featuring R1 & R2



Picture 8 – R1



Picture 9 – Lifted hip cover



Picture 10 – Dilapidated dormer

The central rooftop was accessible by surveyors and comprised of a mosaic of pitched roofs of single layer corrugated material, covering open plan commercial space beneath and featuring negligible suitability for roosting within (See Section 3.2.2.). Where brick walls were present, they were well sealed and did not feature suitable PRFs.



Picture 11 – Central pitched roofs



Picture 12 – Gable end of R3

3.3.2 Internal

The internal structure was in full active use as a commercial furniture store and warehouse, with all rooms and levels featuring some level of anthropogenic use apart from the loft voids (where present). No evidence of bats, including droppings, wall staining, or feeding remains, were observed anywhere throughout the internal survey, with the entire site internally accessible.

R1's loft void was well sealed from within apart from slight light spill entering the cavity from the eaves. No tears in the internal insulation were present, and the void was assessed as providing negligible potential to support a roost.



Picture 13 – Light spill within R1



Picture 14 – Well sealed internals of R1

R2's loft voids served as publicly accessible showrooms and were fully sealed from within, featuring negligible potential to support a roost.



Picture 15 – R2

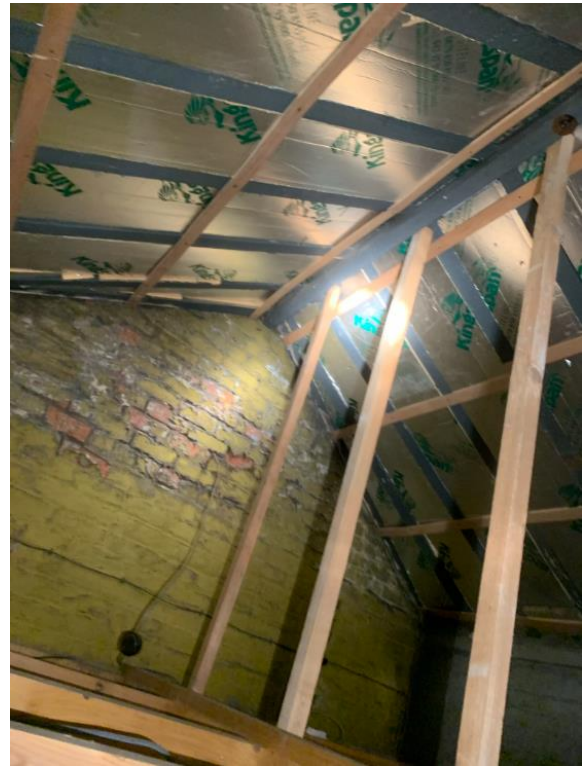


Picture 16 – R2

R3's loft void was similarly well sealed, featuring no light spill.

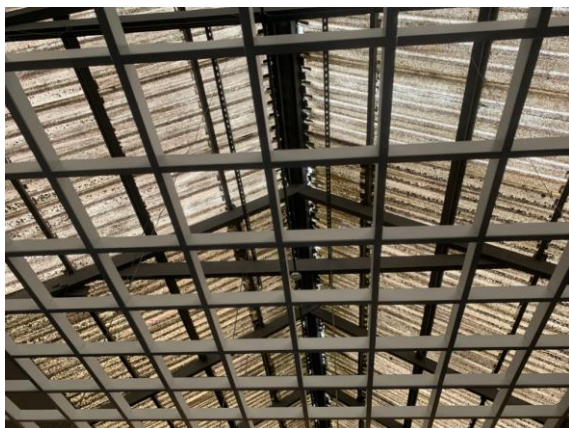


Picture 17 – R3



Picture 18 – R3

All of the central roof spaces, along with the large warehouse space to the north, were open plan with the public access and warehouse floors beneath and consisted of single corrugated sheet material which provided no small crevices for bat species to roost within. All these areas were assessed as providing negligible potential to support a roost.



Picture 17 – Example of central roof space



Picture 18 – Northern warehouse roof space

3.3.3 Summary

Although the site was large and featured a complex mosaic of pitched roof spaces, relatively few PRFs were observed during the survey. The internal structure was generally well maintained, utilised frequently and featured no evidence of inhabitation by bats. Those few PRFs present on the external structure featured poor connectivity to suitable habitat in the wider environment and were generally subject to high levels of light and noise pollution due to the site's presence in a heavily urban population centre.

The site was assessed as having **low** potential to support a bat roost due to the PRFs present along R1 and R2.

4 Recommendations

4.1 Proposed Development

Cityside are proposing to develop land at 140 Great Ancoats Street in Manchester (hereafter referred to as ‘the site’). The proposals include the demolition of the existing onsite structure and the construction of a residential high rise.

4.2 Further Survey

Based on the professional judgement of an experienced ecologist, the site has been assessed as providing **low** bat roosting potential.

Therefore, further survey work is required for the proposed works to proceed.

A minimum of one dusk emergence or dawn re-entry survey is to be undertaken on site to confirm presence or likely absence of roosting bats. All surveys should be undertaken in accordance with the current BCT guidance (Collins, 2016).

The survey would involve situating a number of suitably qualified surveyors around the external faces of each building, focusing on the areas adjacent to buildings scheduled for demolition, to monitor for bats emerging from potential roost locations (dusk emergence survey) for a specified amount of time. The survey should be completed between May and August (inclusive). It is anticipated that five surveyors will be required to fully cover the entirety of the building.

If bats are identified roosting within the buildings on site, a minimum of three surveys will be required to inform a Natural England EPSL. The surveys will identify what bat roosts are present and will in turn clarify what mitigation will be required as part of the EPSL. Roost provision, lighting and timescales will be considered as part of the licence.

An EPSL can only be submitted once full planning permission has been granted and all wildlife conditions have been discharged.

4.3 Lighting Mitigation

Proposed lighting should follow the protocols outlined in the Institute for Lighting Engineers document “Guidance for the Reduction of Obtrusive Lighting” (2005) and the Bat Conservation Trust’s “Bats and Artificial Lighting in the UK” (2018). Lighting recommendations include:

- Keep site lighting to minimum levels.
- Luminaries should lack UV elements and preferably LED lighting with a warm white light should be used over cool white light (ideally <2700Kelvin).
- Lighting should feature peak wavelengths greater than 550nm.
- Internal lighting should be positioned away from windows to minimise light spill, where appropriate.
- Light placement should be downward facing to prevent excess horizontal or vertical light spill.
- The use of integrated fittings such as cowls, shields, louvres, and hoods, that effectively contain light spill from unintended areas, where appropriate.

- The use of hard landscaping features to block light and create dark corridors.
- Avoid illuminating any areas currently not excessively artificially lit, namely the site courtyard to the north.
- Use of timed security lights should be set on motion-sensors and using short, 1-minute timers, to minimise light use, where appropriate.
- Column heights of lighting can be considered to minimise light spill.

5 Conclusion

The site was assessed as featuring **low** bat roosting potential. As such, a minimum of one further emergence/re-entry survey relating to roosting bats is required for the proposed works to proceed.

6 References

Bat Conservation Trust (2016). Bat Surveys for Professional Ecologists: Good Practice Guidelines (Third Edition). The Bat Conservation Trust, London.

Bat Conservation Trust / Institution of Lighting Professionals (2018). Guidance Note 08/18: Bats and artificial lighting in the UK. Bats and the Built Environment series.

CIEEM (2019). Advice Note on the Lifespan of Ecological Reports and Surveys. CIEEM.

English Nature (2004). Bat Mitigation Guidelines. English Nature, Peterborough.

Institute of Lighting Engineers (2005). Guidance Notes for the Reduction of Obtrusive Light.

Appendix 1 – Relevant Legislation

Bats

All species of bat are listed on Schedule 5 of the *Wildlife and Countryside Act 1981* (as amended) and Schedule 2 of *The Conservation of Habitats and Species Regulations 2017*, making them *European Protected Species*. They are afforded full protection under Section 9(4) of the Act and Regulation 41 of the Regulations. These make it an offence to:

- deliberately capture, injure or kill any such animal;
- deliberately disturb any such animal, including in particular any disturbance which is likely to:
 - impair its ability to survive, breed, or rear or nurture their young;
 - impair its ability to hibernate or migrate.
 - affect significantly the local distribution or abundance of that species; or
- damage or destroy a breeding site or resting place of any such animal; or
- intentionally or recklessly disturb any of these animals while it is occupying a structure or place that it uses for shelter or protection; or
- intentionally or recklessly obstruct access to any place that any of these animals uses for shelter or protection

In addition, five British bat species are listed on Annex II of the Habitats Directive. These are:

- Greater horseshoe bat (*Rhinolophus ferrumequinum*)
- Lesser horseshoe bat (*Rhinolophus hipposideros*)
- Bechstein's bat (*Myotis bechsteinii*)
- Barbastelle (*Barbastella barbastellus*)
- Greater mouse-eared bat (*Myotis myotis*)

Appendix 2 – Granted EPSL within 5km of the site

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Does licence impact on a breeding site	Does licence allow damage of breeding site	Does licence allow damage of a resting place	Does licence allow destruction of breeding site	Does licence allow destruction of a resting place
EPSM2012-5061	BLE	10/12/2012	31/08/2015	Y	-	-	Y	Y
2014-490-EPS-MIT	C-PIP; S-PIP	23/04/2014	30/06/2017	N	N	N	N	Y
2014-6380-EPS-MIT	C-PIP	18/02/2015	16/02/2020	N	N	N	N	Y
2014-6380-EPS-MIT-1	C-PIP	01/12/2015	16/02/2020	N	N	N	N	Y
2015-15766-EPS-MIT	C-PIP	01/11/2015	31/07/2016	N	N	N	N	Y
2015-16009-EPS-MIT	C-PIP	28/01/2016	27/01/2021	N	N	N	N	Y
2015-17752-EPS-MIT	C-PIP	04/01/2016	30/09/2016	N	N	N	N	Y
2015-7649-EPS-MIT	C-PIP	27/03/2015	31/12/2015	N	N	N	N	Y
EPSM2013-6051	C-PIP	26/07/2013	01/12/2014	N	-	-	N	Y
EPSM2012-4767	C-PIP	28/08/2012	30/09/2013	N	-	-	N	Y
EPSM2013-5644	C-PIP	04/07/2013	01/03/2015	N	-	-	N	Y

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Does licence impact on a breeding site	Does licence allow damage of breeding site	Does licence allow damage of a resting place	Does licence allow destruction of breeding site	Does licence allow destruction of a resting place
EPSM2010-1888	C-PIP; S-PIP	25/10/2010	29/02/2012	N	-	-	N	Y
2016-22910-EPS-MIT	C-PIP	25/04/2016	24/04/2021	N	N	Y	N	Y
2016-22910-EPS-MIT-1	C-PIP	08/09/2016	24/04/2021	N	N	Y	N	Y
2016-24504-EPS-MIT	C-PIP	15/07/2016	01/01/2018	N	N	N	N	Y
2016-21779-EPS-MIT	C-PIP	01/04/2016	01/04/2021	N	N	N	N	Y
2014-6380-EPS-MIT-2	C-PIP	15/08/2017	30/06/2023	N	N	N	N	Y
2015-15766-EPS-MIT-1	C-PIP	20/07/2016	20/07/2016	N	N	N	N	Y
2017-28375-EPS-MIT	C-PIP; NATT	13/04/2017	30/06/2022	N	N	N	N	Y
2017-31569-EPS-MIT	C-PIP	26/10/2017	31/10/2019	N	N	N	N	Y
2014-3531-EPS-MIT-2	C-PIP	01/12/2016	01/12/2016	N	N	N	N	Y
2016-24504-EPS-MIT-1	C-PIP	21/11/2016	21/11/2016	N	N	N	N	Y

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Does licence impact on a breeding site	Does licence allow damage of breeding site	Does licence allow damage of a resting place	Does licence allow destruction of breeding site	Does licence allow destruction of a resting place
2018-33674-EPS-MIT	C-PIP	12/03/2018	30/04/2040	N	N	Y	N	Y
2018-35287-EPS-MIT	C-PIP; S-PIP	05/06/2018	30/09/2019	N	N	Y	N	Y
2019-38955-EPS-MIT	C-PIP	14/02/2019	28/02/2021	N	N	Y	N	Y
2019-43484-EPS-MIT	C-PIP	14/11/2019	31/08/2020	N	N	N	N	Y
2020-45213-EPS-MIT	C-PIP	05/03/2020	01/01/2025	N	N	N	N	Y
2020-50604-EPS-MIT	C-PIP	22/01/2021	16/01/2022	N	N	N	N	Y
2019-41924-EPS-MIT-1	C-PIP	13/01/2020	31/08/2031	Y	N	N	Y	Y
2014-3531-EPS-MIT	C-PIP	01/10/2014	30/09/2019	N	N	N	N	Y
2014-3531-EPS-MIT-1	C-PIP	06/01/2015	30/09/2020	N	N	N	N	Y
2014-3569-EPS-MIT	C-PIP	07/10/2014	30/11/2014	N	N	N	N	Y
2014-3598-EPS-MIT	C-PIP	15/10/2014	01/12/2014	N	N	N	N	Y

Case reference of granted application	Species on the licence	Licence Start Date	Licence End Date	Does licence impact on a breeding site	Does licence allow damage of breeding site	Does licence allow damage of a resting place	Does licence allow destruction of breeding site	Does licence allow destruction of a resting place
2014-4400-EPS-MIT	C-PIP	23/12/2014	30/04/2015	N	N	Y	N	N
2014-4400-EPS-MIT-1	C-PIP	25/03/2015	30/04/2015	N	N	Y	N	N
EPSM2013-5575	C-PIP	23/05/2013	30/09/2016	N	-	-	N	N
2014-4219-EPS-MIT	C-PIP	27/10/2014	31/10/2020	N	N	N	N	Y