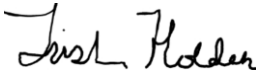


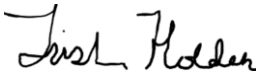




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Amendments following client comments			

INTRODUCTION

BACKGROUND

Tetra Tech were commissioned by BCP Council in March 2024 to produce a technical note to address the loss of Broughton House due to arson, along with the implications to potential roosting bats. The buildings history, roosting features and enhancement measures for bats are summarised in this report at Constitution Hill, Poole, hereafter referred to as “the Site”.

The summary report is to support a retrospective planning application for the demolition of Broughton House.

This summary report has been prepared by Tetra Tech Principal Ecologist Trish Holden BSc MSc MCIEEM and the conditions pertinent to it are provided in Appendix A.

SITE LOCATION

Broughton House is set within the former Bournemouth and Poole College located on Constitution Hill Road and is centered at Ordnance Survey National Grid Reference SZ 0275 9212. The Site comprises of a former building (Broughton House) bound by hard standing. The immediate wider area comprises amenity grassland, scrub, mixed woodland, hard standing and buildings which are bound by residential dwellings to the north, east, south and west.

PURPOSE OF THE REPORT

The purpose of this letter report is to provide a summary of Broughton House historical preliminary roost assessment, details of the arson at the site, the required enhancement measures and a brief summary of the surveys to be continued in spring and summer of 2024 for the wider site.

HISTORICAL INFORMATION

BROUGHTON HOUSE

Lindsay Carrington Ecological Services Limited were commissioned by BCP Council in 2020 to conduct an updated ecological appraisal and phase 1 bat survey at Bournemouth and Poole College. Prior to these 2020 surveys, ECOSA undertook an Ecological Appraisal (EA) and phase 1 bat survey in 2014. The ECOSA report has not been provided to Tetra Tech at the time of producing this summary report and therefore the sites overall condition and buildings roosting potential is unknown.

Broughton House is situated to the south-east of a vacant former college campus. The building is encased by hard standing, mixed woodland, and amenity grassland. The survey of the building in 2020¹ describes its degraded internal state including ceiling damage with no internal inspection carried out due to health and safety grounds. Externally its described as a brick two-storey building with a hipped clay roof, three chimneys and wooden soffits. Overall, the building was reported in a good state of condition bar the roof with notable lifts and gaps in the tiled roof. The building was assessed as providing high potential to support roosting bats due to the presence of numerous access/egress points and roosting features. Additionally, the report notes that the adjacent former campus site is of moderate potential for use by foraging and commuting bats.

1- Lindsay Carrington Ecological Services, (2021), *Phase 1 Bat Survey and Ecological Appraisal Bournemouth and Poole College*. Produced for BCP Council.

ARSON

BCP Council have provided Tetra Tech with photographs and full details of the arson that took place on the 5th of February 2023, refer to Appendix B for photos. Turley appointed by BCP Council to co-ordinate the retrospective demolition application has provided Tetra Tech with the following information:

Since the Broughton House building, and the wider College Campus closed, the whole site has been subjected to continued vandalism, including setting of deliberate fires. Broughton House, in particular, was particularly affected by the anti-social and criminal behaviour and identified to be in an unsafe condition to the point where the existing buildings are in declining state.

On 5th February 2023 the vacant Broughton House building was severely damaged by a large fire.

Following the fire in February 2023, BCP Building Control visited and reviewed the site and confirmed that “the extent and severity of dilapidation of all the buildings on the site is concerning and they clearly pose a significant risk to anyone in the vicinity of them as well as the obvious dangers arising from unauthorised access and associated anti-social behaviour issues which are apparent there”.

BCP Building Control outlined that urgent action was required, in the interests of public safety, which included the demolition of dangerous structures, including Broughton House. It was further advised that the “demolition of Broughton House should be carried out without delay”, in accordance with Section 80 of the Building Act 1984.

As such Broughton House was demolished on 20th February 2023.

IMPLICATIONS AND REQUIRED ENHANCEMENTS

As Tetra Tech was instructed subsequent to the arson and demolition of Broughton House in February 2023. The 2021 Lindsay Carrington Report provides insight to the overall condition and likely suitability without the further surveys carried out in line with Bat Conservation Trust Survey Guidelines to confirm likely absence or presence at Broughton House.²

2 – Collins, J. (2023) Bat Surveys for Professional Ecologists: Good Practice Guidelines. 4th edition. Bat Conservation Trust, London.

Based on the overall internal conditions in absence of an internal survey given the collapsing ceilings and notable water damage it is likely that the roof voids provided sub-optimal conditions for void species such as brown long-eared bats (*Plecotus auritus*). The external conditions noted suitable crevice roosting opportunities mainly within the clay roof in the form of lifts and gaps. It is considered likely that in absence of the further emergence surveys to inform species and roost characteristic that the building could have provided daytime roosts for common and soprano pipistrelle bats (*Pipistrellus pipistrellus* and *Pipistrellus pygmaeus*). This is further backed by the main enhancement target species within the 2021 EA was for *Pipistrellus spp.* It is noted within the 2021 EA that two records for serotine (*Eptesicus serotinus*) were found within 2km of the site, although the exact type of record is unknown.

Use of DEFRA MAGIC Maps notes six European Protected Species Mitigation Licenses within 2km spanning 2010 to 2017, these include the following:

- 2017-27976-EPS-MIT, serotine, destruction of a known resting place;
- 2016-26036-EPS-MIT, serotine and common pipistrelle, destruction of a known resting place;
- 2016-26036-EPS-MIT-2, serotine and common pipistrelle;
- 2017-27976-EPS-MIT-1, serotine;
- 2016-19713-EPS-MIT, brown long-eared and common pipistrelle, destruction of known resting place;
- EPSM2010-2493, brown long-eared, serotine and common pipistrelle, destruction of known resting place.

Given the unknown potential and overall lack of information on the building's hibernation suitability, it is considered likely that any roosts within the building were mainly transitional (i.e. spring, autumn) and summer use.

With the known records of common pipistrelle, soprano pipistrelle and serotine within 2km of the site and notable external crevice features noted within 2021 bat assessment, to compensate for the potential of daytime roosts within Broughton House, replacement roosts in the form of one ridge roosts and four bat boxes will be required, refer to Appendix C. Given the unknown usage and orientations, replacement roosts will need to cover all elevations (north, south, east and west).

It is recommended due to known vandalism at the Site and therefore the potential for public to damage or destroy said boxes, the mitigatory boxes are installed once the Site is more secure. In addition, without proposed plans, the replacement ridge roosts will be confirmed at a later stage. Appendix C provides an example of ridge roost design to be incorporated into a new building once plans are known. As the 2021 appraisal noted other buildings on the former Bournemouth and Poole campus with roosting potential in building 2, 3, 4, 5, 6, 7 and 8, along with the nomadic nature of bats, the potential loss of roosts in Broughton will have interim compensation until the recommended compensatory ridge and bat box replacement roosts are installed on site.

Review of the demolition photo provided by BCP Council has shown that the extent of the works were enclosed by Heras fencing and undertaken within the hard standing areas. It is considered with these measures in place the demolition works were unlikely to have caused impacts upon the boundary woodland. With the woodland boundary features intact, the commuting and foraging habitats for local bats has remained intact with no damage or destruction.

SUMMARY

Broughton House was noted as providing high potential for roosting bats, in absence of targeted emergence surveys it is considered likely that the building could provide daytime roosts for up to three species of bats (common pipistrelle, soprano pipistrelle and serotine). The demolition of the building carried out in February 2023 is considered unlikely to have disturbed any daytime roosts, however given the potential loss of roosting sites, enhancements have been recommended to compensate for their potential loss. Given the regular vandalism at the site, it is recommended that these new roosting features are not installed until the site is secured to avoid any further disturbance and or damage for roosting bats.

Tetra Tech will proceed with an updated preliminary roost appraisal, ecological appraisal and affirmative emergence surveys to inform roost characteristics and species on the wider Site. These surveys will inform the design with targeted mitigation and enhancement on site for roosting, foraging and commuting bats.

APPENDIX A – REPORT CONDITIONS

This Report has been prepared using reasonable skill and care for the sole benefit of BCP Council (“the Client”) for the proposed uses stated in the report by Tetra Tech Limited (“Tetra Tech”). Tetra Tech exclude all liability for any other uses and to any other party. The report must not be relied on or reproduced in whole or in part by any other party without the copyright holder’s permission.

No liability is accepted or warranty given for; unconfirmed data, third party documents and information supplied to Tetra Tech or for the performance, reliability, standing etc, of any products, services, organisations or companies referred to in this report. Tetra Tech does not purport to provide specialist legal, tax or accounting advice.

The report refers, within the limitations stated, to the environment of the site in the context of the surrounding area at the time of the inspections¹. Environmental conditions can vary and no warranty is given as to the possibility of changes in the environment of the site and surrounding area at differing times. No investigative method can eliminate the possibility of obtaining partially imprecise, incomplete or not fully representative information. Any monitoring or survey work undertaken as part of the commission will have been subject to limitations, including for example timescale, seasonal and weather-related conditions. Actual environmental conditions are typically more complex and variable than the investigative, predictive and modelling approaches indicate in practice, and the output of such approaches cannot be relied upon as a comprehensive or accurate indicator of future conditions. The “shelf life” of the Report will be determined by a number of factors including; its original purpose, the Client’s instructions, passage of time, advances in technology and techniques, changes in legislation etc. and therefore may require future re-assessment.

The whole of the report must be read as other sections of the report may contain information which puts into context the findings in any executive summary.

The performance of environmental protection measures and of buildings and other structures in relation to acoustics, vibration, noise mitigation and other environmental issues is influenced to a large extent by the degree to which the relevant environmental considerations are incorporated into the final design and specifications and the quality of workmanship and compliance with the specifications on site during construction. Tetra Tech accept no liability for issues with performance arising from such factors.

APPENDIX B – PHOTOS



Photograph 1 – Fire at Broughton House, 5th February 2023 (photo supplied by BCP Council)



Photograph 2 – Aerial view showing the extent of the fire damage to Broughton House (photo supplied by BCP Council)



Photograph 3 – Aerial view of the demolition carried out on the 20th of February 2023, due care has been noted for the boundary vegetation (photo supplied by BCP Council)

APPENDIX C – BAT BOXES AND RIDGE ROOST DESIGN

To compensate for the loss of potential crevice roosts the following boxes (or of similar specification) are recommended:

2FN Schwegler



Placement of two boxes within onsite boundary trees, positioned away from any light sources (i.e. street lamps), hung at heights of 3-6 metres, with one box facing south-easterly and one facing south-westerly. Please see manufacturer's guidelines for hanging including recommended nail types. Available from nhbs.com

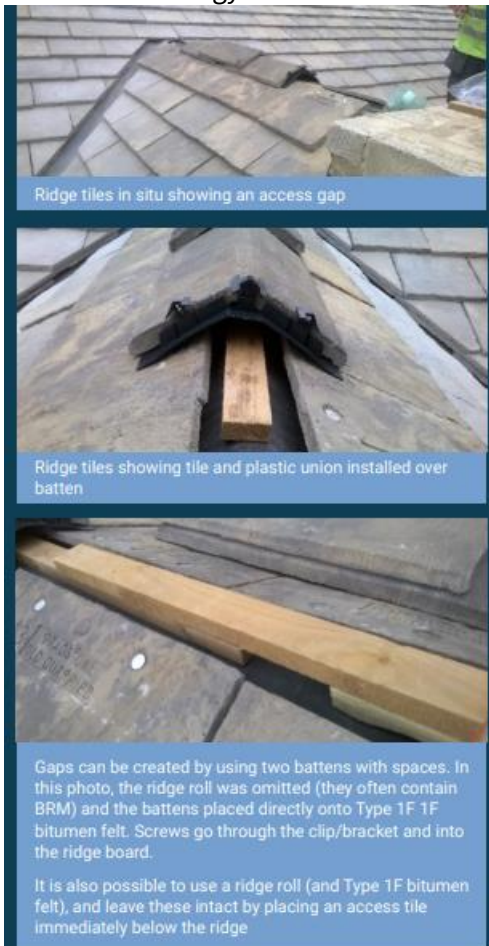
Vincent Pro Bat Box



Placement of two boxes, within onsite boundary trees, positioned away from light sources (i.e. street lamps), hung at heights of 3-6 metres with one box facing north-westerly and one south-easterly. Available from nhbs.com

Ridge Roost Design

Case Study 12 From, Reason, P.F. and Wray, S. (2023). *UK Bat Mitigation Guidelines: a guide to impact assessment, mitigation and compensation for developments affecting bats*. Version 1.1. Chartered Institute of Ecology and Environmental Management, Ampfield.



Installation of dry ridge roost, ‘A dry ridge system is a method of mechanically fixing ridge tiles to the ridge of a roof without the use of mortar. The most popular system is to use ‘ridge roll ventilation’ which involves covering the roof batten with ridge ventilation roll and adhering it to the tile or slate. The ridge tiles are then installed over the ventilation roll to secure it in place, laying them across the apex of the roof using plastic unions, clips, clamps, screws and washers. The unions secure the tiles together with a small expansion gap while the clamps are placed between tiles and screwed down into ridge board or batten to provide a wind-proof fixing that allows roof movement.’

‘Gaps can be created by using two battens with spaces.’

‘Screws go through the clip/bracket and into the ridge board. It is also possible to use a ridge roll (and Type 1F bitumen felt), and leave these intact by placing an access tile immediately below the ridge.’

Note: the process of fitting an access tile below the ridge is the same with or without a dry ridge.

A hole has been cut in the felt below the access tile.

The roofer cut the felt and pinned it up (rather than down) so that if any water does get past the tiles the felt (as far as possible) will divert it to either side and run down the felt rather than into the roof.

Please note for this dry ridge roost, only **bitumen (1F) felt** can be used. Access points for bats will be via two Morris bat slates placed at either end of the 2 metre ridge roost.