

BIODIVERSITY TECHNICAL NOTE



**THE
ENVIRONMENT
PARTNERSHIP**

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Castlefield's, Manchester

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The Embassy Village Castlefield's – Aerial Endoscope Inspection Technical Note

1.0 Introduction

- 1.1 The Environment Partnership (TEP) was commissioned in August 2023 by Embassy Village to undertake a Preliminary Roost Assessment of built structures, including railway arches and a hut, between the Bridgewater Canal and River Medlock in Manchester (SJ 82719 97479) to discharge planning condition 3 for the development of 40 single-occupancy residential accommodation pods, services, amenity space and hard/soft landscaping (Planning Ref: 129923/FO/2021).

"No development shall commence unless and until location-specific endoscope surveys for bats of any cracks and crevices in the brickwork that may be subject to repair works needed to facilitate the development are carried out in accordance with a statement to be submitted to and approved in writing by the City Council as local planning authority. Endoscope surveys must be undertaken by suitably qualified persons. In the event that bats are found, a method statement giving details of measures to be taken to avoid any harm to bats during works shall be submitted to and approved in writing by the City Council. The approved measure shall be carried out during the works."

- 1.2 A Preliminary Roost Assessment of structures for roosting bats was undertaken by TEP Ecologist on 31st August 2023 (Natural England survey licence ref: 2015-14108-CLS-CLS). The structures were inspected internally for field signs of bats such as droppings, scratch marks, insect remains and urine smear marks. Binoculars and an endoscope were used as aids. At height with use of a mewp. The survey was conducted with year-round use by bats in mind. Structures were categorised in accordance with the Bat Conservation Trust (BCT) Good Practice Guidelines (Collins, 2016) for their potential to support roosting bats.
- 1.3 This report should be read in conjunction with previous survey reports TEP 8680.001 and 9873.001 Letter dated February 2023.
- 1.4 There are in total 11 open railway arches which support the Network Rail railway line, 11 railway arches supporting the Transport for Greater Manchester (TfGM) and one 'hut' (as described in Proposed Demolition Plan _MP_02_1100 Rev A).
- 1.5 The Network Rail arches are comprised of brick and sandstone and are generally well-pointed. Potential Roost Features (PRFs) identified include small gaps between the brick

arch and the southern brick abutment on the western-most four arches (Figure 1). These PRFs extend from approximately 1m to the top of the abutment. The gaps at ground-level could be inspected with an endoscope and provide a depth of approximately 3cm. Previous features could not be inspected due to heights via mewp.

- 1.6 All 11 arches were re-assessed, and gaps were inspected from the MEWP, using an endoscope.

2.0 Updated Ecological Survey Results

- 2.1 Several potential roost sites were identified, gaps in the brickwork in arches 1-4 along the southern abutments, gaps in the brickwork in arches 1-4 along the southern abutments, gaps in the brickwork in arches 1-4 along the southern abutments.

- 2.2 This report is to present results of the at height surveys from the mewp survey inspections.

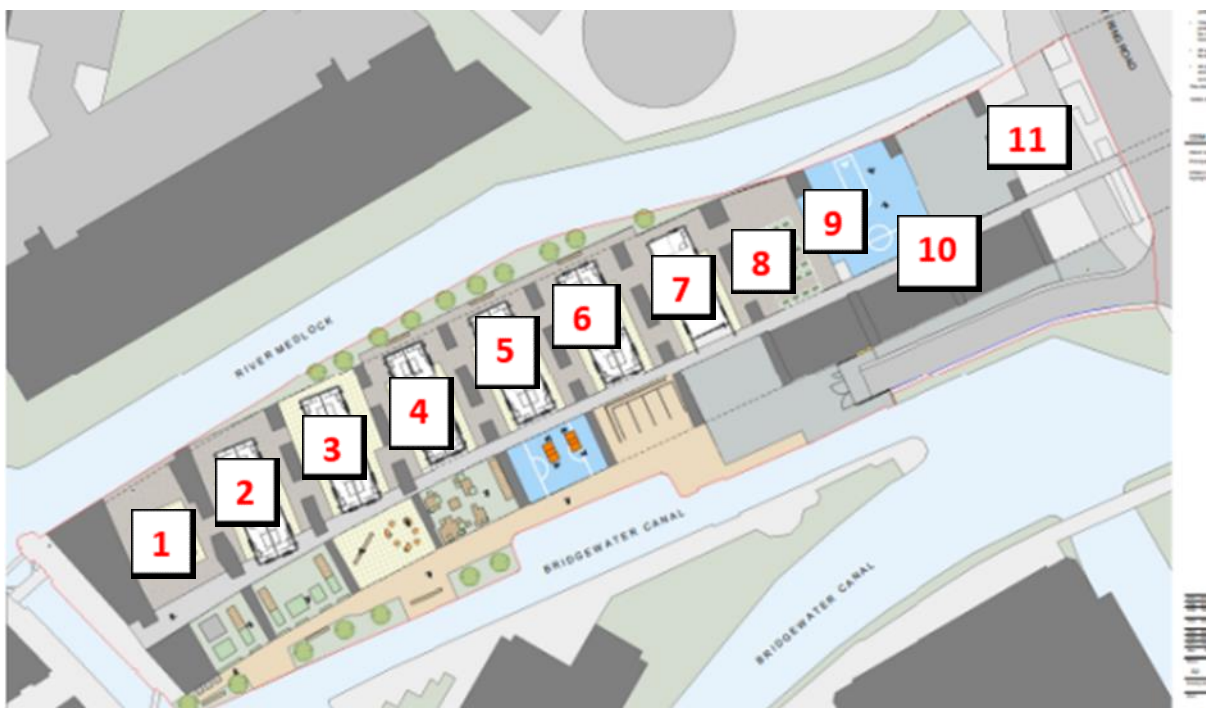


Figure 1: Arches number from west to east.

- 2.3 Gaps in the brickwork in arches 1-4 along the southern abutments were inspected. The gaps were 3-10cm deep, running with water and filled with soil. There was no evidence of any bat activity (bats, droppings, fur rubbing or scratching) associated with these gaps. There was no evidence that the gaps had been used by bats. (Figure 2a & 2b)

Figure 2a



Figure 2b



- 2.4 Gaps above and below the stone plinth in the centre of the arch walls were inspected in arches 2-8. In some areas the stonework is crumbling but the gaps were less than 5cm in depth. There was no evidence of any bat activity (bats, droppings, fur rubbing or scratching) associated with these gaps. There was no evidence that the gaps had been used by bats. (Figure 3a & 3b)

Figure 3a & 3b



- 2.5 Gaps in the brickwork at the centre of the walls of arches 6 and 7. The gaps were the deepest of all inspected 5-15cm deep. The gaps were very damp and filled with rubble and soil. There was no evidence of any bat activity (bats, droppings, fur rubbing or scratching) associated with these gaps. There was no evidence that the gaps had been used by bats. (Figure 4)



- 2.6 We were unable to access the cold store and inspect the plywood boards as the roller-door has been jammed from the inside.

3.0 Conclusions

- 3.1 No evidence of bat roosting activity was found in either survey 12/12/22 or 31/08/23.
- 3.2 The cold store should be inspected once the roller door has been removed. This should be carried out before any clearing-up has been carried out on the interior of the cold store.
- 3.3 As was noted in the letter 7/2/23 the proposed structures will leave a 3m gap between the walls of the arches and the accommodation, staff and village pods. There will also be a minimum gap of 3m from the top of the pods to the top of the arches.
- 3.4 The gaps identified and inspected will not be closed as part of the works but will remain in place.

4.0 Recommendations

- 4.1 Consideration should be given to the lighting under the arches. Where possible no light should illuminate the top of the arches or the top of modular homes. Reduced lighting/down lighters should be used between the walls of the arches and the accommodation, staff and village pods.
- 4.2 A Sensitive Lighting Design should be implemented as part of the scheme to avoid indirect impacts of lighting on nocturnal and crepuscular species, with reference to the retained woodland. There are four key lighting design principles: Use of unnecessary lighting will be avoided.
- 4.3 Spatial spread of lighting – the horizontal and vertical spread of artificial light will be minimised and consider both primary and reflected light sources. Directional lighting can be achieved by angle and orientation of beam, use of a cowl, louvre or other light shield, or a combination of these.
- 4.4 Timing and duration of lighting – timers and bespoke dimming regimes may be used to ensure that luminaires are reduced at times of predicted low use. These can be set to change with the seasons and therefore reflect the shifting time of dusk and dawn throughout the year. Motion sensors provide further control to ensure that areas are illuminated only when required.
- 4.5 Intensity and colour of lighting – light intensity will be as low as possible whilst meeting the objectives of the intended function. The colour of lighting will need to take into account the sensitivity of the ecological receptors on site. Light sources selected should emit zero ultra-violet light wherever possible. Interim guidance from the Bat Conservation Trust (2014) recommends that white and blue spectrum light should be avoided or, where white lights are required, these should be of warm/neutral colour and have a peak wavelength above 550 nanometers. Narrow spectrum light sources should be used (to lower the range of species affected by lighting).

