Addendum to Bat Roost Potential Survey by Brooks Ecological

March 2017

- Omit paragraph 3 and replace with the following:

  It is proposed to demolish the majority of the existing fire station building, leaving the 3 storey administration unit, converting the upper 2 floors to residential and office to the ground floor, whilst attaching a shed structure which will form quasi warehouse units; see below figure.

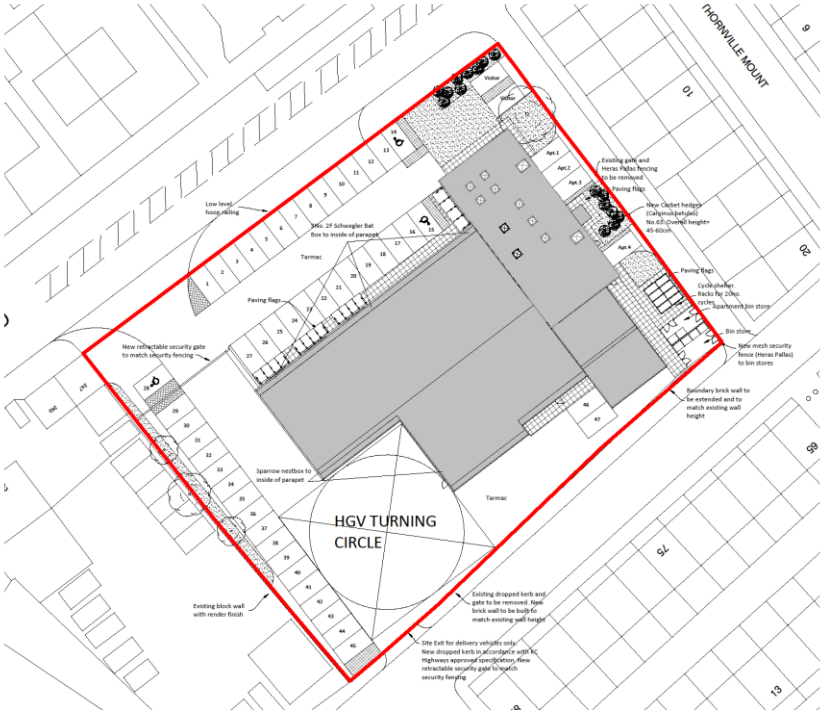

Figure 2

Proposals plan- taken from Martin Walsh Architectural drawing:

GTDE-MWA-XX-XX-DR-S0-B-0009

Brooks Ecological
Grounded advice

Bat Roost Potential Survey
Dewsbury Fire Station,
Huddersfield Road, Dewsbury

Report reference: R-2145-01
February 2015

Report Title:	Bat Roost Potential Survey Dewsbury Fire Station, Huddersfield Road, Dewsbury
Report Reference:	R-2145-01
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Date:	24.02.15

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Grounded advice

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Summary Statement

The building has been found to have *very limited* bat roost potential and no evidence of current or historic roosting has been found.

The proposed demolition can therefore proceed with little risk of impacting upon roosting bats.

Introduction

1. Brooks Ecological was commissioned to carry out a bat survey of the former Dewsbury Fire Station off Huddersfield Road in Dewsbury, Huddersfield, West Yorkshire (SE 233 207).

2. The application site is a former fire station set within the town of Dewsbury, surrounded by housing and built development on all sides.

Figure 1

Site location and areas referred to in the report

Proposals

3. It is proposed to demolish the existing fire station building and construct a single commercial unit and associated car parking; see below figure.

Figure 2

Proposals plan – taken from Rance Booth Smith Architects drawing: 4005 101 B

Box 1 *Legal background*

Bats are afforded full protection under The Wildlife and Countryside Act (1981) plus amendments, and the Conservation of Habitats and Species Regulations 2010. Under these Acts it is an offence among others, to recklessly kill, injure or disturb bats. It is also an offence to destroy or obstruct a roost even if bats are not in occupancy at the time of the action.

There are no defences against contravention of the Conservation of Habitats and Species Regulations 2010 which means that it is important for detailed and well designed bat surveys to be carried out, prior to carrying out activities that may impact upon bat roosts such as demolition of buildings or removal of trees.

Where bats are found within a potential development site, a license from Natural England may need to be secured if works that could otherwise contravene legislation are to be carried out. These licences are only issued where Natural England is satisfied that works are unavoidable and would not have a negative impact on the favourable conservation status of bats. A Natural England license requires that the potential development site has full planning permission and that bats were a material consideration of the planning permission.

Box 2 *Bat roosts*

Bats roost in buildings and trees in different locations depending upon time of year and environmental factors such as position of the sun, proximity to heat sources and feeding grounds. The following types are commonly referred to:

Transitional roosts:

Bats frequently gather early in the season (March to April) before dispersing to summer roosts. Bats can be found in high numbers in these roosts for a very short period. Transitional roosts can also be found shortly before hibernation in August to October when bats (depending upon species) can gather in roosts not used earlier in the season.

Maternity roosts:

These are among the most important roosts and are normally occupied from May to August. Depending on the species involved, some maternity roosts can contain a very significant proportion of the local population.

Summer (non-breeding) roosts

Small groups of non-breeding female and male bats can gather in these roosts or bats from a local population may choose to roost individually. There are normally a large number of suitable locations for summer non-breeding roosts and these may be routinely used or used only on an occasional basis. Irregularly used summer roosts can be very hard to find without unreasonable survey effort.

Mating roosts

Around September bats will gather in roost to mate; these are often in different locations than summer or breeding roosts.

Hibernation roosts

As bats in hibernation roosts are highly vulnerable to disturbance and bats can be present in large numbers these are considered to be among the most important bat roosts. Many species of bats roost in large and nationally important hibernation roosts associated with underground sites, many of which are well known and protected. However, the most common bat in the UK (the common pipistrelle) is largely unaccounted for in winter but thought to disperse and roost individually or in small groups in thermally stable cracks and crevices in thick walls or trees.

Local Status

4. The application site is within the natural range of species of bats listed in Table 1.

Table 1: Bat species recorded within 100km of the application site

Species	National status
Pipistrelles (*Pipistrellus pipistrellus* and *P. pygmaeus*)	widespread/common
Nathusius' Pipistrelle (*Pipistrellus nathusii*)	Widespread/rare
Noctule (*Nyctalus noctula*)	widespread/frequent
Leisler's (*Nyctalus leisleri*)	widespread/rare
Brown long-eared (*Plecotus auritus*)	widespread/common
Natterer's (*Myotis nattereri*)	widespread/frequent
Daubenton's (*Myotis daubentonii*)	widespread/common
Whiskered/Brandt's (*Myotis mystacinus* and *M. brandtii*)	widespread/scarce
Alcathoe's (*Myotis alcathoe*)	Local/unknown

Method

5. A thorough daytime inspection of the site was made in February 2015 in order to look for evidence of bats and assess bat roosting potential. Evidence of bats may take the form of droppings, feeding remains, live bats, dead bats, stains on masonry or timber from the oils in bats' fur and claw marks made by bats regularly roosting in the same location.

6. Bat roosting potential of the building was classified according to the following criteria set out in Table 2, developed with reference to the Bat Mitigation Guidelines (2004), Bat Workers Manual (2004) and the Bat Conservation Trust Good Practice Guidelines (2012).

Table 2: Bat roosting potential in buildings

Roosting potential	Criteria
Good	Buildings that have many areas suitable for roosting with a large number of potential access points. These are normally in sheltered locations, subject to low variation in temperature. Buildings with good potential could be used for a whole range of roosts including maternity roosts.
Moderate	Buildings with a smaller number of areas suitable for roosting, but still supporting features that could be attractive to bats and potentially support maternity roosts.
Limited	Buildings with limited roosting opportunities. These may be in locations that are subject to wide temperature fluctuations and drafts. They could be used as occasional or transient roosts, but are unsuitable for maternity roosts. Buildings that would otherwise be moderate to good potential but have reduced value due to other factors such as exposed location, separation from nearby foraging, or presence of strong lighting.
Very Limited	Buildings that have no obvious places for bats to roost, but could be used on a sporadic or occasional basis for feeding or solitary day roosting.
None	Buildings which appear unsuitable for roosting bats due to clear lack of roosting spaces such as voids etc and/or absence of suitable access points.

7. Survey and assessment was directed by Christopher Shaw BSc (Hons) ACIEEM. Chris has over 4 years experience of carrying out bat surveys in a professional

capacity and is registered to use the new Class Survey Licence WML CL18 (Bat Survey Level 2). He is an active member of the West Yorkshire Bat Group and West Yorkshire Bat Care Scheme.

Records

8. The local records provider; West Yorkshire Ecology was asked to provide all records within 2km of the application site. A total of thirty three records were returned, relating to five species of bat (Daubenton's, leisler's, common pipistrelle, soprano pipistrelle and brown long-eared), as well as indeterminate species of myotid, pipistrelle and vesper bats.

9. Of these, eleven relate to roosts, the closest of which is a daubenton's bachelor roost recorded in 2005 within Cleggford Bridge c.460m northeast. Amongst the roost records, a single record of a maternity colony has been returned. This relates to a vesper bat roost of unknown size located within a property at 138 Boothroyd Lane, c.890m from the site. All other roosts are over 760m distant and are scattered fairly evenly throughout the Dewsbury area; see the below figure.

10. Records returned by WYE indicate a good local bat population persists within the landscape surrounding the site.

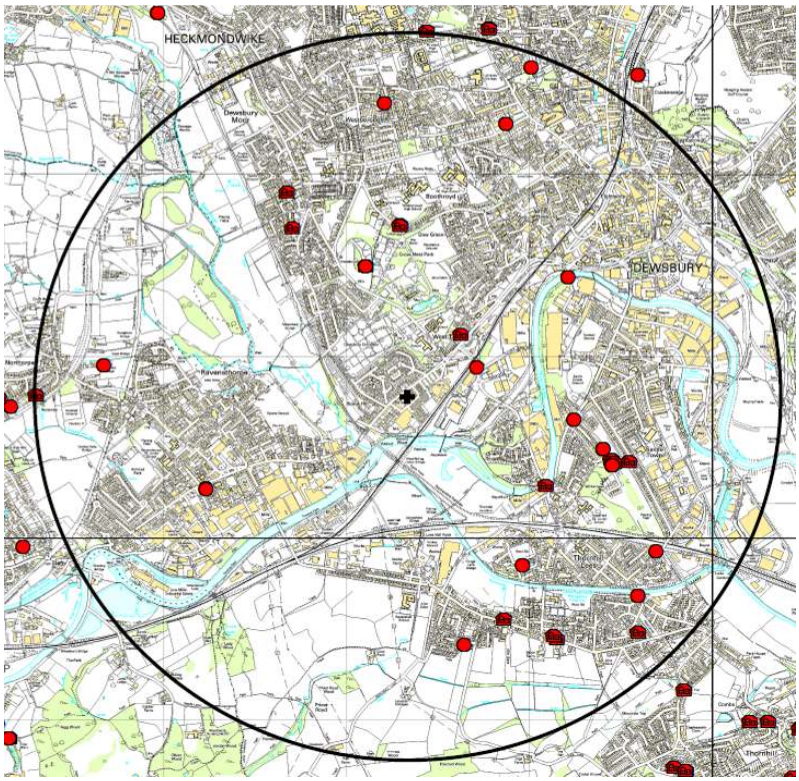

Figure 3

Location of WYE bat records

Context

11. The site lies along the south-western edge of Dewsbury, positioned alongside the busy A644. The site is immediately surrounded on all sides by built development, with semi-detached properties to the north and terrace housing to the south.

12. In a wider context, housing to the north quickly gives way to public open space, with a large cemetery found c.250m northwest and Crows Nest Park just beyond this to the north. To the east, a tree lined railway track intersects housing c.120m from the site, passing roughly southwest to northeast. This railway line then passes over the River Calder c.200m south of the site, and forms a strong green corridor through the local area, meandering roughly east to west. The river passes several large areas of broadleaf woodland and connects to the Calder and Hebble Navigation c.510m southwest and a large beck c.340m west.

13. The local area can therefore be seen to support large areas of well connected high value bat habitat, which are easily accessible for any bats that may use the site, via nearby green corridors (river and railway line).

Results

14. The application site represents a fairly typical West Yorkshire Fire and Rescue Services property; with a large single-storey garage to the centre, a mix of three and single-storey sections to the northeast used as offices / living quarters and a six storey training tower to the east. A single-storey outbuilding is also found within the southwest corner.

Figure 4 Looking east across the site from the western boundary

15. All sections of the building, with the exception of the garage, are of a similar construction, with reinforced concrete frame and curtain brick (cavity) curtain walls and flat felt covered roofs. The external brickwork is found to be in an excellent state of repair throughout; with no areas of damage or missing pointing being obvious which could permit bats access into the cavity wall space.

Figure 5

Looking south across the three-storey section.

Note brickwork in excellent condition.

16. The wall tops of the three-storey section are well sealed with the concrete frame as seen in the above figure. The frame similarly runs along the wall tops of single storey sections, but have, uPVC soffit boxing along the eaves. This boxing is found to be well sealed throughout.

Figure 6

Well sealed uPVC soffit boxing along eaves of single-storey sections.

17. Unlike the rest of the building, the garage is covered with a layer of white render, which is found to be intact throughout. Plastic guards run along the wall tops and for the most part form a tight seal. Occasional gaps are noted where the guard has raised slightly from the wall, however all of these appear too tight to permit bats access.

18. Most of the roof is flat built and felt lined, with the exception of a small multiple pitch glass and concrete canopy found to the southeast corner.

Figure 7

Multiple pitch glass and concrete canopy.

19. The small single-storey outbuilding within the site's southwest corner is of a similar construction to the main fire station building, with blue cavity brick walls topped with a course of concrete frame which extends to form the roof. The brickwork is found to be in an excellent state of repair with no areas of damage or missing pointing being obvious.

20. Several small single-storey extensions adjoin the outbuildings northern elevation. Here, the roofs are flat built and covered with bitumen felt. Wooden barge boards run along the eaves and are well sealed, preventing bats accessing any internal spaces.

Figure 8

Looking south at the small out building.

Table 3 Bat Roosting Potential checklist

Feature	Notes
Walls	No accessible cavities
Roof	Flat built. Mix of concrete blocks and bitumen felt. All sealed.
Eaves	Sealed
Flashing	Sealed
Basements/cellars	Not found
Trees	None affected

Evaluation and recommendations

21. Despite the site being positioned in close proximity to high value bat foraging and commuting habitat, the nature of the construction and general good repair of the buildings will make it difficult for bats to find access into suitable crevices or voids.

22. No evidence of roosting was found and it is concluded that the building provides only *very limited* bat roost potential; in accordance with Table 2 above. As such, no further surveys are recommended and the proposed demolition can proceed with little risk of impacting upon roosting bats.

General advice

23. Even where surveys have been carried out which demonstrate absence of roosting, site workers should always be aware that bats can move into buildings previously found not to support them. On this basis work should proceed with care and if a bat is found during the conversion, works should stop immediately and a professional ecologist and/or the bat helpline (on 0845 1300 228 Bat Conservation Trust) should be contacted. The local office of Natural England should also be contacted to seek advice.

Enhancement

24. The UK government's guidance on nature conservation in relation to development (NPPF) makes it clear that opportunities should be sought through their planning system to use development as an opportunity to enhance sites for wildlife where possible.

25. The new commercial plot could easily be built to include features to attract roosting. Such features could easily be designed without creating conflicts with the owner, and could be bespoke and designed in by the architect in cooperation with an ecologist. Alternatively, a wide range of 'off the peg' bat boxes are currently on the market which could be fixed to the building following construction.

References

Bat Conservation Trust (2012) Bat Surveys – Good Practice Guidelines

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

JNCC (2004) The Bat Workers Manual. 3rd Edition.

ODPM circular 06/05 (2005) Biodiversity and Geological Conservation - Statutory Obligations and Their Impact Within the Planning System http://www.communities.gov.uk/publications/planningandbuilding/circularbiodiversity

Conservation of Habitats and Species Regulations 2010 http://www.legislation.gov.uk/uksi/2010/490/contents/made