

<b>CLIENT:</b>	AESCUK
<b>PROJECT:</b>	AESC Plant 3
<b>SUBJECT:</b>	Aerial tree inspection survey
<b>JOB NO.:</b>	NT15821
<b>DATE OF SITE VISITS:</b>	25 <sup>th</sup> – 26 <sup>th</sup> October 2023
<b>PREPARED BY:</b>	Lucia Ruiz Mut - Ecologist
<b>REVIEWED BY</b>	Tim Palmer – Technical Director (ecology)

## 1 BACKGROUND

- 1.1.1 Wardell Armstrong (WA) was commissioned by AESCUK to undertake a series of aerial tree inspection surveys in support of the AESC Plant 3 development proposal. The surveys aimed to inspect all trees which are suitable for roosting bats for the presence or recent evidence of roosting bats. A number of potential roosting features (PRF's) within the trees were examined.
- 1.1.2 A ground level Preliminary Bat Roost Assessment (PBRA) was undertaken in 2023 by WA, from which trees that would require an aerial inspection to closer inspect PRF's at height were identified. As a result, T7, TG8, T9 and T10 were selected for further aerial inspections. The tree locations are shown on Figure 12.5 'Bat Roost Suitability'.
- 1.1.3 The trees surveyed are scheduled to be removed to facilitate the proposed works, which has the potential to negatively impact bats and their roosts, should they be present.

## 2 SURVEY METHODS

### 2.1 Identification of Trees with Roost Features

- 2.1.1 During the Site visit on the 25<sup>th</sup> and 26<sup>th</sup> of October 2023, seven trees were inspected of which six trees were subjected to an aerial inspection. These included T7, TG8 East TG9 West, T9 and T10 plus an additional tree that were considered as offering potential roosting features at the time of the survey. That is, an additional ash tree labelled T9+ due to its proximity to T9. In addition, a large over-mature willow tree was inspected from the ground but is considered unsafe to climb.

### 2.2 Tree Climbing Approach/Method


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- 2.2.1 The trees were first inspected from the ground to identify PRF's such as cracks, splits, holes and loose bark, cavities, etc. To investigate PRFs further, the trees were climbed by two certified tree climber ecologists using rope and harness access methods.
  - 2.2.2 The PRFs were closely inspected and, where possible, a digital endoscope was used to assess in greater detail their suitability for roosting bats and to look for evidence of bats, such as live or dead bats, staining or odour.

### 3 RESULTS



3.1.1 Table 1 below summarises the results of the climb and inspect surveys:

# Technical Note


**Table 1:** *Climb and Inspect Survey Results*

Label	Note	Photo	BRP
T7			
	<p>Cavity in trunk, N aspect c. 1.5m high, extending 20cm but exposed through a secondary hole above leading to element ingress. Potentially suitable for a limited number of individuals in summer.</p>		PRF-I



# Technical Note

	<p>Cavity in trunk on SE aspect approx. size 50cm length and 5 cm wide. Exposed to the elements. There is a superficial cavity within.</p>			<p>Negligible</p>
	<p>Branch cavity on E aspect of the N facing main branch, approx. size 10x10cm, extending c. 20cm offering room for a small number of bats.</p>			<p>PRF- I</p>



# Technical Note

TG8			
Western tree	Loose bark on western tree around trunk base, primarily on the NE aspect but present in all directions, heavily open to the elements, i.e., rain, but well protected from wind dur to dense hawthorn surrounding the tree. Has the potential to be used opportunistically by a small number of bats.		PRF - I

# Technical Note



Eastern tree	Some loose bark on eastern tree but no significant void created, may increase suitable over time.			Negligible
Additional willow	Large branch tear out exposing heartwood of the tree on the S aspect 1.5-2m high, creating a large cavity within. It slightly exposed but cavity extends c. 40-50cm within			PRF - M

# Technical Note

<p>Additional willow</p>	<p>Another cavity in branch, didn't appear to connect with the above-mentioned tear out but could not be further inspected for safety reasons.</p>		<p>PRF-M/H</p>
<p>T9</p>			
	<p>Trunk showing cavity/callus roll which does not extend or provide cavity and upward facing branch that has snapped off offering no entrance hole/cavity</p>		<p>Negligible</p>



# Technical Note

T9+			
	<p>Trunk cavity on the NE aspect at the base, extending c. 15-20cm into the heart of the tree</p>		<p>PRF-I</p>
T10			
	<p>Knot hole on the NE aspect c. 4m high, approx. size 5x5cm, superficial, does not extend further, plus 2 more, one on each main branch of the first fork.</p>		<p>Negligible</p>

# Technical Note

	<p>Knot hole on the main trunk SE aspect c. 4m high. Cavity extends 30cm, potentially at risk of water ingress but appears dry. Approx. size 4x6cm entrance hole but widening inside to 15cm wide or more.</p>			PRF-M
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# Technical Note

	<p>Trunk cavity at the base of the N aspect, c. 10cm wide entrance. Cavity extending into the heart of the tree over 1m up and width widens as it extends upwards.</p>		<p>PRF - M</p>
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## 4 CONCLUSION

### 4.1 Results Summary

- 4.1.1 The climb and inspect surveys successfully managed to exhaustively search T7, TG8 (apart from the new identified willow due to safety reasons), T9, T9+ and T10 for signs of use by bats. No bat roosts were identified within any of the trees surveyed at the time of the survey.
- 4.1.2 T7, TG8 and T9+ show bat roosting features with potential to be used by a small number of individuals (PRF-I) during the active season between March to October inclusive.
- 4.1.3 The willow tree included within TG8, and T10, show bat roosting features with potential to be use by a larger number of bats (PRF-M) and, in particular, T10 is considered to offer maternity roost potential in the form of the cavity at the base of the trunk.

### 4.2 Mitigation

- 4.2.1 It is considered that all of the inspected trees can be felled without the loss of roosts, based on the likely absence of roosting bats and the lack of observed evidence.
- 4.2.2 The willow tree to the west of TG8 has one feature of at least moderate suitability, which could not be safely accessed and therefore remains unchecked. It is therefore recommended that this feature is subject to emergence/dawn survey in advance of felling.
- 4.2.3 It is recommended that as a precaution, all trees are inspected again (where possible), immediately in advance of felling. In the event that there is any doubt regarding the potential presence of bats, the trees should be felled according to a 'soft felling' protocol, whereby all of the limbs containing features are lowered to the ground using rope access techniques. Soft felling would not be required where a further full inspection within 24hrs confirmed the absence of bat roosts.



**KEY**

- Site Boundary
- Hedgerow with Bat Roost Suitability
- Trees with Bat Roost Suitability

**Notes:**

Boundaries are indicative  
 Aerial imagery shown for context purposes only.

REVISION	DETAILS	DATE	DRAWN	CHKD	APPD
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CLIENT  
 AESC UK

PROJECT  
 AESC PLANT 3

DRAWING TITLE  
 FIGURE 12.5  
 BAT ROOST SUITABILITY

DRG No.	NT15821/FIGURE 12.5	REV	P01
DRG SIZE	A3	SCALE	1:5,000
DRAWN BY	SRW	DATE	09/10/2023
	CHECKED BY	APPROVED BY	

