Suite 204, Level 2
62 Moore Street
Austinmer NSW 2515
t: (02) 4243 3804

19 September 2023

Our ref: 23WOL4937

Gartner Rose
Level 3, 15 Blue Street
North Sydney NSW 2060

Attention: Fraser Hamilton

Dear Fraser,

Cook to Cove Greenway – Compensatory Microbat Habitat Installation

Eco Logical Australia Pty Ltd (ELA) was commissioned by Gartner Rose to install compensatory microbat habitat as part of the Cook to Cove Greenway project, located within the Inner West Council LGA. The Greenway footprint requires the temporary closure of the Cadigal Reserve, *Miniopterus orianae oceanensis* (Large Bent-winged Bat) roost. Prior to this closure mitigation measures outlined in the Cooks to Cove GreenWay (In-Corridor Works) – Review of Environmental Factors (REF) (ELA 2021a) and the Greenway In-Corridor Works -Microbat Management Plan (MMP) (ELA, 2021b) require compensatory habitat be installed to minimise impact on the microbats located within the site. Where practicable, this task was conducted in accordance with the MMP.

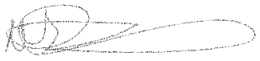
Three locations previously identified in the MMP (ELA, 2021) were selected for compensatory habitat installation. The compensatory habitat was installed by Gartner Rose staff under the supervision of ELA Ecologist Claire Plunkett and bat specialist Dr. Rod Armistead on 24 August 2023. The sites were selected due to location and suitability as determined by the ecologists. Hard habitat structures were not considered appropriate due to the function of these culverts. As such, the compensatory habitat took the form of lines of silicone gel placed along the rooves of the three culverts adjacent to areas considered to be potential habitat by the ecologists. The silicone provides an artificial ridge to increase the available surface areas from which bats can hang from. The benefit of this approach is that it gives the bats additional areas to land and traverse to allow them to better access and utilise the existing potential habitat in each culvert.

Details for compensatory habitat location are provided in Table 1 and Figure 1 - 3 provide photos of the compensatory habitat installation. Photographs of the potential roost habitats identified within these three structures are also provided. No evidence of roost activity (e.g., urine staining, guano, living or dead microbats) was observed in any of the culverts despite potential habitat being present.

Future monitoring for occupancy and maintenance requirements is recommended and should occur twice a year for five years at the same time as the monitoring of the roost is conducted at Cadigal Reserve as outlined in the MMP (ELA, 2021).

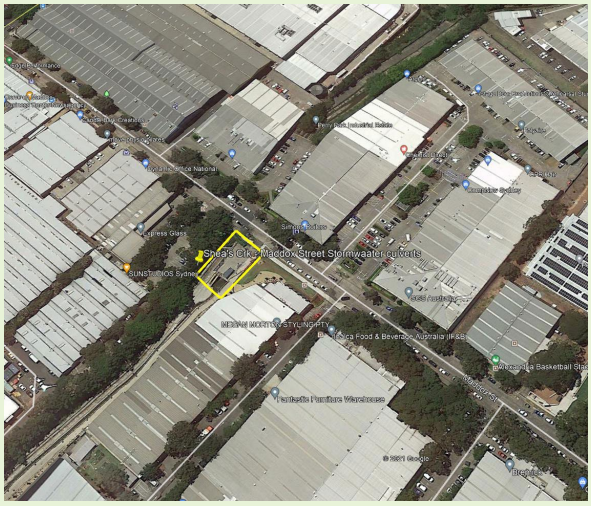
If you have any questions about this report, please do not hesitate to contact me on 02 4243 3812 or at natalie.richards@ecoaus.com.au

Regards,



Natalie Richards
Environmental Consultant

Table 1: Compensatory habitat location details

Site ID	Site Name	Coordinates	Site description	Site Map
1	Burrows Road, Alexandria	-33.910578, 151.189656	Small underground culvert, with low light pollution. Close to Sydney Parklands to provide good foraging habitat	
2	Maddox Creek, Alexandria	-33.907789, 151.193733	Underground culvert that extends south of Maddox Street. Low light disturbance.	
3	Premier Street, Tempe	-33.921200, 151.153619	Stormwater drain and canal flowing into the Cooks River, under Cary Street/ Premier Street/ Mackey Park. Low light disturbance and open flyways for exiting and entering the roost. Suitable depth (135m). Smells of ammonia near the culvert may be indicative of historical bat usage.	

Site photos – Burrows Road

Culvert structure

Culvert showing light intrusion

Roof of culvert with compensatory silicone habitat installed.

Roof of culvert showing cobwebs and existing potential habitat

Figure 1: Burrows Road- Site photos

Site photos – Maddox Creek, Alexandria

Culvert entrance

Compensatory silicone habitat installed

Compensatory silicone habitat installed

Roof of culvert showing discolouration

Compensatory silicone habitat and potential existing habitat

Potential habitat

Figure 2: Maddox Creek Site Photos

Site photos – Premier Street, Tempe

Culvert entrance

Silicone habitat installation

Silicone habitat installation

Cobwebs indicating lack of current use

Potential existing habitat

Potential existing habitat

Site photos – Premier Street, Tempe

Potential existing habitat

Cobwebs indicating lack of current use

Silicone habitat installation

Existing potential habitat

Existing potential habitat

Existing potential habitat

Site photos – Premier Street, Tempe

Existing potential habitat

Existing potential habitat

Existing potential habitat

Existing potential habitat

Existing potential habitat

Cobwebs indicating limited current microbat use

Site photos – Premier Street, Tempe

Existing potential habitat

Cobwebs indicating limited current microbat use

Figure 3: Premier Street Site Photos