Project B.A.T.

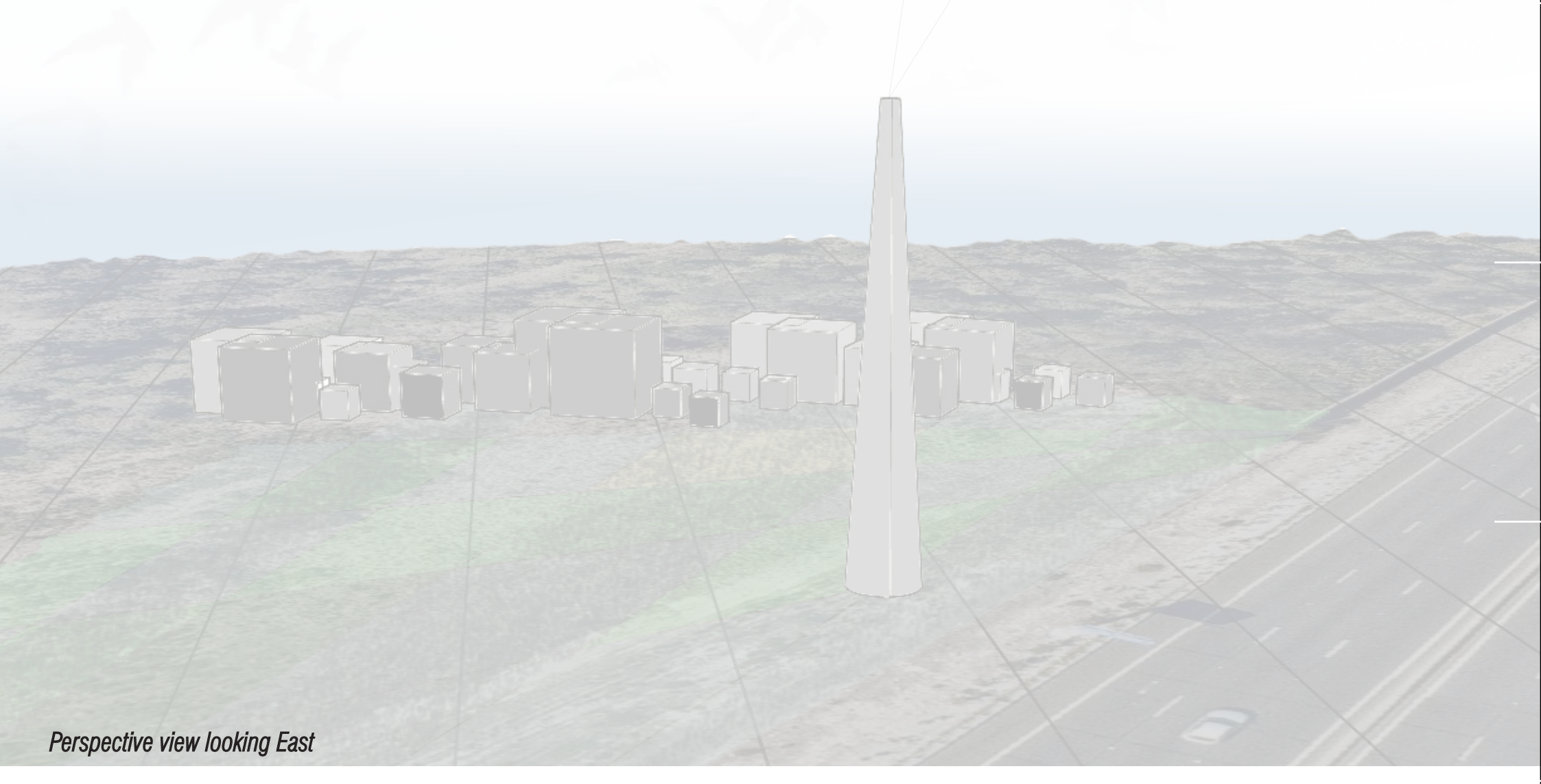
Informing the public and ensuring the longevity of bats in the Sydney region

Bats in Sydney face serious challenges to their longevity. A combination of lack of appreciation for these flying mammals and direct threats to their habitat and food supply has become more acute in recent years. While land clearing since colonial times has meant the loss of habitat and alteration of food supply, contemporary threats now include the contest over airspace, trees, parks and gardens and the underside of buildings and structures across the city. Some species including the Flying Fox *(Pteropodidae alecto)* are now present in augmented numbers and are considered by citizens as a source of noise, faeces, smell, disease. As such, measures have been employed to move growing populations – that have thrived in the presence of food-heavy suburban gardens – by various means including smoking, use of sound and light and even government-endorsed culling.

Concern for Sydney bats is four-fold. Firstly, general ecological health can be maintained through seed dispersal; second, bats help keep insect populations under control; third, this region possesses 28 of Australia's 90 bat species of which 11 are listed as 'vulnerable' by the the *Threatened Species Conservation Act* (1995) and are protected by national legislation (the EPBC act); finally, Sydney bats have an intrinsic value and contribute to the character of Sydney as a city.

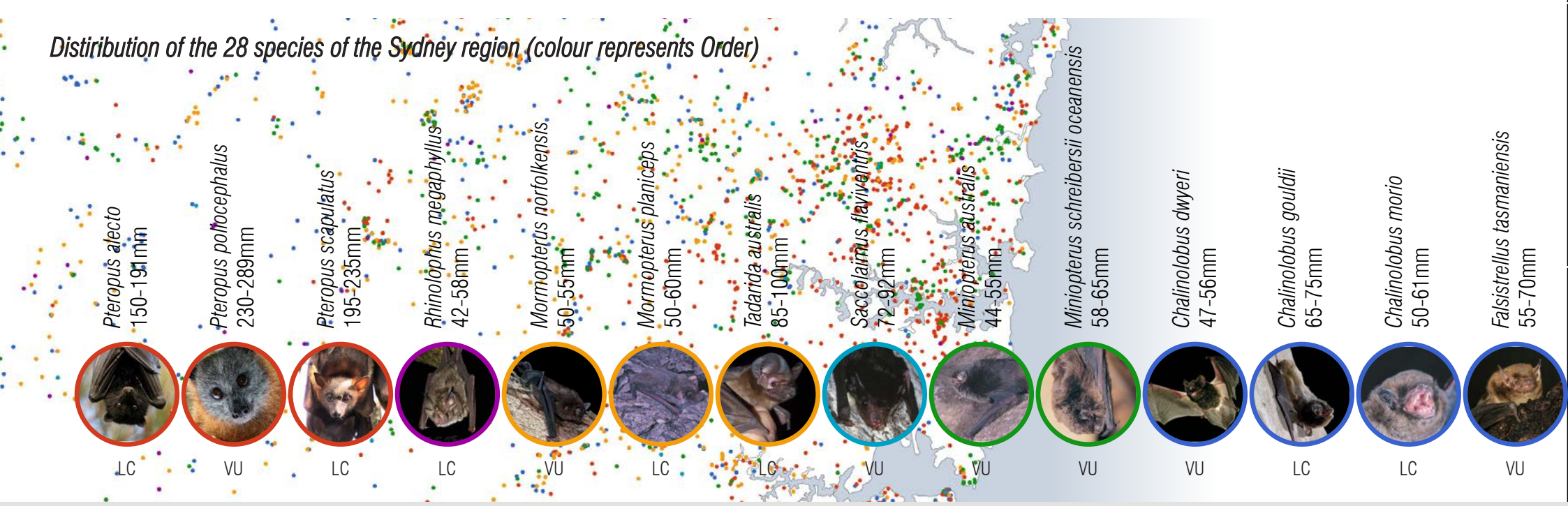
This project asserts that bats hold a valuable place in the urban environment of Sydney and prescribes an approach towards their longevity through three key moves:

1. The *Bat-o-tel* provides nesting for all 24 species through simple custom-built nesting structures. These structures, constructed in perforated steel in varying shades of grey sit inconspicuously at the rear of the site and are tailored to individual species through specific apertures and levels of enclosure.
2. The *Bat-o-meter* acts to inform the public of *bat-o-tel* population health. Coloured LED rings illuminate a 25 metre tower located adjacent to the southbound carriageway. This acts to inform passing motorists of the health of the population (red=unhealthy/green=healthy population).
3. The *Bat-spotlight* playfully animates the sky with a familiar twist of an iconic bat symbol and simple physical signage identifies the bat-o-tel (for bats and humans alike).



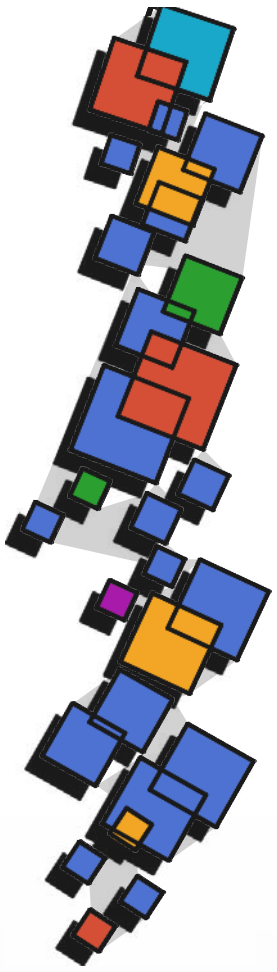
Perspective view looking East

Distiribution of the 28 species of the Sydney region (colour represents Order)



Bat-spotlight and signage

Projection of recognisable symbol by solar powered spotlight ...in this instance calling the city - not a superhero - to action in order to save species, not city



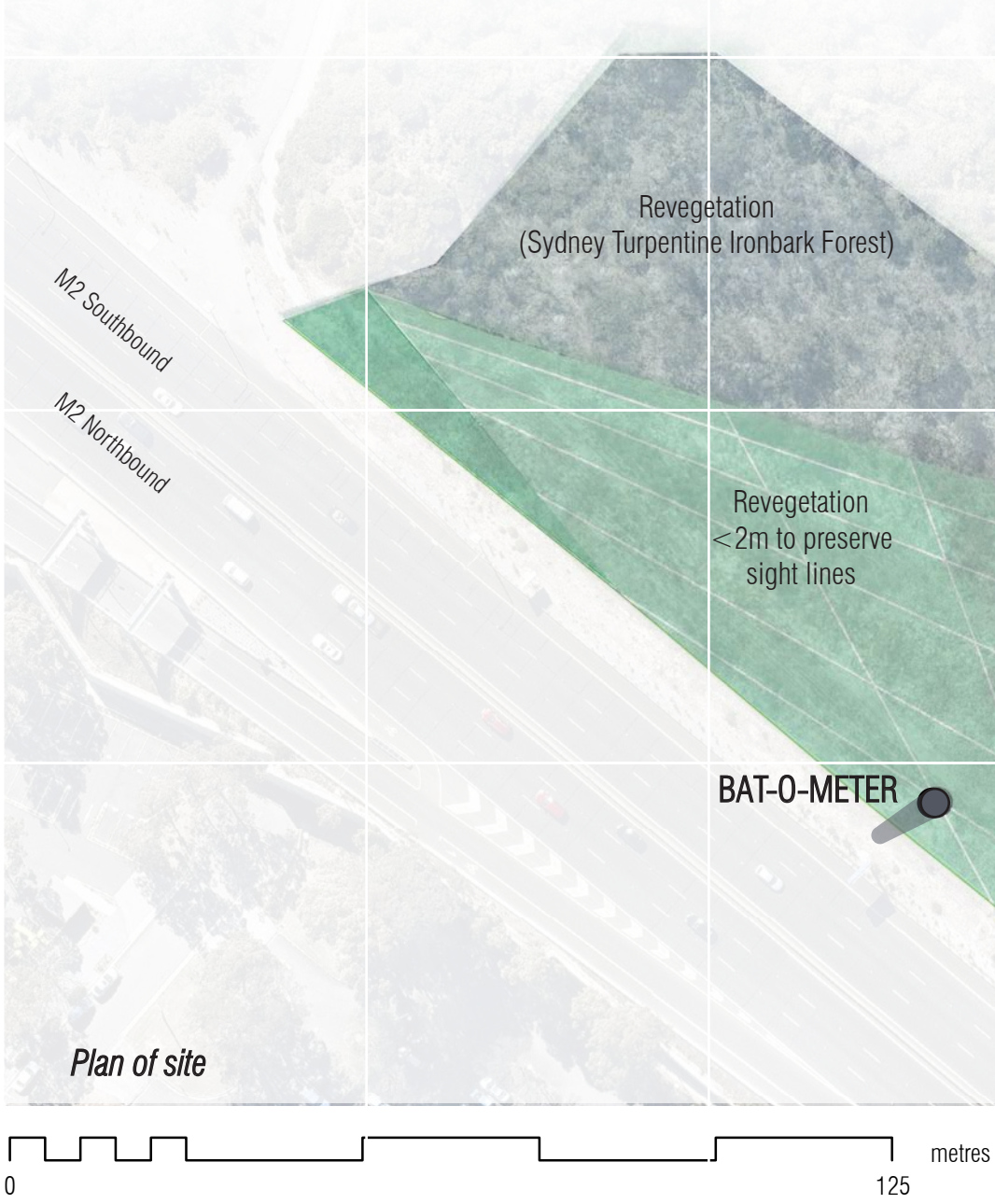
Bat-o-tel

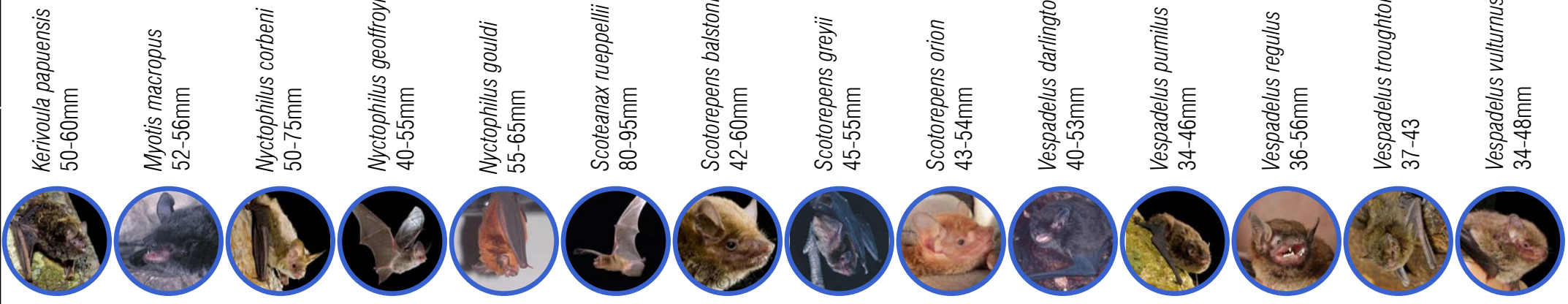
Provides elevated nesting opportunities for all 28 species present in the Sydney region. Structures of 2.5m^3, 3m^3, 4m^3, 5m^3 and 6m^3. Colours are to indicate the nesting function by bat FAMILY (as represented by at base of page in species documentation)

Illustration of typical apertures and materials for *Bat-o-tel*

Apertures are @12-15mm, 16-20mm, 15-25mm and 25-35mm dependent upon species.

Variety of steel mesh and aperture examples





Conservation status in NSW LC = Least Concern; VU = Vulnerable

(FAMILY)