

3 SUITABILITY OF MITIGATION MEASURES/SAFEGUARDS

3.1 Noise and Vibration

3.1.1 Background

Section 7 of the Connell Wagner EIA dealt with an assessment of noise impacts, using the NSW Government's *Environmental Criteria for Road Traffic Noise* (ECRTN) noise guidelines and the RTA *Environmental Noise Management Manual* (ENMM). For freeways or arterial roads (the classification applicable to this upgrade of the Pacific Highway), the guideline has two assessment categories for residential noise receptors:

New Freeway or Arterial Road Corridor

This refers to a freeway, arterial or sub-arterial road that is proposed on a corridor that has not previously been a freeway, arterial or sub-arterial road, or to an existing freeway, arterial or sub-arterial road that is being substantially realigned.

The guidelines for a new road are:

- $L_{Aeq,15hr}$ (7.00 am – 10.00 pm) = 55 dBA
- $L_{Aeq,9hr}$ (10.00 pm – 7.00 am) = 50 dBA

Where existing noise levels exceeded these figures, the guidelines required that new roads be designed so existing noise levels were not increased by more than 0.5 dBA.

Redevelopment of Existing Freeway or Arterial Road

This refers to an existing freeway, arterial or sub-arterial corridor where it is proposed to increase its traffic carrying capacity, change the traffic mix, or change the road alignment through design or engineering changes. Redevelopment does not cover minor road works designed to improve safety, such as straightening curves, installing traffic control devices, or making minor road re-alignments. The criteria relating to a freeway redevelopment are:

- $L_{Aeq,15hr}$ (7.00 am – 10.00 pm) = 60 dBA
- $L_{Aeq,9hr}$ (10.00 pm – 7.00 am) = 55 dBA

Where these criteria are already exceeded, the ECRTN states '*in all cases, the redevelopment should be designed so as not to increase existing noise levels by more than 2 dB(A).*'

For non-residential developments the adopted criteria were:

| Type of Development | Noise Criteria dB(A) | |
|---|----------------------|--------------------|
| | Day | Night |
| Places of worship | $L_{eq(1hr)} = 40$ | $L_{eq(1hr)} = 40$ |
| Active recreation (e.g. golf courses) | $L_{eq(15hr)} = 60$ | |
| Passive recreation and school playgrounds | $L_{eq(15hr)} = 55$ | |

The EIS noted that the guidelines were not mandatory.