# Coomera Connector Stage 1

## (Second M1)

March 2023

## Road traffic noise

**The Department of Transport and Main Roads (TMR) is aware of the impact road traffic noise has on members of the community living and/or working near the Coomera Connector. This is why TMR follows the Transport Noise Management Code of Practice (the Code) to ensure every effort is made to minimise disruption created from road traffic noise.**

By following the Code when managing operational road traffic and construction noise, TMR aims to demonstrate compliance with its General Environmental Duty as required by the *Environmental Protection Act 1994*.

Volume 1, November 2013 of the Code, guides the direction for assessment, design and management of the impact of road traffic noise, and this section of the Code is used to determine where noise treatments may be required.

A detailed road traffic noise assessment for Coomera Connector Stage 1 has been completed to ensure noise is managed appropriately into the future. This will be updated throughout detailed design, refining the result to ensure the management strategy is appropriate for design solutions.

### Noise monitoring

In accordance with the Code, acoustic engineers external to TMR completed initial noise monitoring between July and September 2020 at properties along the corridor considered to be representative of those properties exposed to traffic noise. This monitoring has established baseline noise levels.

Additional monitoring to gather further baseline noise levels is being carried out by the design contractor for each construction package.

When Stage 1 is completed and open to traffic, post-construction noise monitoring will be carried out at the same or similar locations to where previous noise monitoring was completed.

This post-construction noise monitoring will help to verify the noise modelling and confirm that any noise reduction measures installed as part of the Coomera Connector project have performed appropriately.

### Noise modelling

As part of finalising the design, predicted noise levels will be modelled and assessed against baseline noise levels taken from actual noise monitoring data obtained from various locations throughout the Stage 1 corridor.

To determine where noise treatments are required, the noise modelling includes such things as the road alignment, ground topography, road gradients and pavement surfaces, predicted traffic volumes, types of vehicles and vehicle speeds.

### Noise barriers

The predicted models for each package will determine the location, type and height of noise barriers required.

However, the model cannot be finalised until the detailed design for each package has been completed.

Where noise barriers are required, these are expected to range from 4-6 metres high, and some barriers may incorporate acrylic panels to enhance natural lighting.

The contractors for each package will contact affected residents with affected residents once this information is available.

*Artist's impression: noise barriers on the Coomera Connector near Monterey Keys.*

## In-house treatments

Volume 1 of the Code outlines that road traffic noise from a new road should be treated once predicted noise levels at residential properties exceed certain criteria. Generally, noise barriers address this requirement, and are most effective when placed either next to the source of the noise (the road) or at the receptor (the property).

TMR's preference for treatment is to install noise barriers as this provides maximum noise reduction benefits to a wider number of properties, and represents best value for money. However, sometimes installing a noise barrier is not possible due to inconsistent terrain levels or when only one property in the catchment is predicted to exceed the criterion because it has upper level living areas.

In these cases, TMR may instead propose in-house treatments such as mechanical ventilation, air conditioning or double-glazing to windows. When considering exceptional noise treatments such as window glazing and air conditioning TMR refers to Section 3.3 of the Code, *Criteria for Exceptional Circumstances Treatment*.

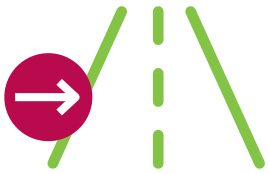
If any properties along the alignment require Exceptional Circumstances Treatments, TMR will contact those landowners.

## Road surface

In addition to noise barriers, the type of road surface to be used on the Coomera Connector will also influence the level of road traffic noise experienced by residents who live close to the project corridor.

Concrete road surfaces are no longer routinely used for state-controlled roads in urbanised areas of Queensland. Today, there are newer road pavements that can be considered, including open graded asphalt, which is the quietest road surface currently available for use in Queensland. The Coomera Connector road surface will be open graded asphalt.

**Open graded asphalt road surface used**
**(for increased safety and reduced noise)**



## Vehicle noise

TMR acknowledges there can be a perceived increase in the overall noise levels generated by intermittent truck engine breaking, motorbikes, modified vehicles and emergency sirens. Noise barriers are incapable of addressing this type of intermittent noise. For example, engine breaking is generally too short to affect long-term noise readings.

TMR is unable to provide strategies to reduce noise events generated by heavy vehicles, as these are usually due to driver behaviour or vehicle maintenance.

It is also relevant to note that engine braking processes significantly reduce brake wear and prevent heat-induced brake fade or failure. It is also a safety mechanism to help heavy trucks slow down.

Due to safety implications, engine braking cannot be prohibited and signs requesting drivers to limit engine braking are not legally enforceable. TMR has found that these signs do not have a measurable effect in limiting engine braking noise in the immediate vicinity and so will not be installing such signage as part of the Coomera Connector project.

## Construction noise

TMR is mindful of the impacts of construction noise on residents and does everything reasonably practicable to minimise noisy works. TMR and its contractors will keep residents up-to-date and informed of noisy works with timely and accurate information. Advanced notice will be provided via flyers, face-to-face meetings, SMS and email.

For more information about construction noise, refer to the *Construction noise* fact sheet.

## Need more information?

Residents and motorists are encouraged to subscribe to the free SMS and email traffic alert service to keep up-to-date on the Coomera Connector Stage 1 project.

To register, contact the project team on the details below:

**Phone:** 1800 568 978 (free call from any landline during business hours, 9am – 5pm, Mon to Fri)

**Email:** coomeraconnector@tmr.qld.gov.au

**Web:** www.tmr.qld.gov.au/coomeraconnector

**Mail:** Department of Transport and Main Roads
PO Box 442, Nerang QLD 4211

Scan the QR Code to go directly to the Coomera Connector web page.

Interpreter

### Interpreter and accessibility services

**Interpreter service:** 13 14 50
**TTY/voice calls:** 13 36 77 (ask for 13 23 80)
**Speak & Listen:** 1300 555 727 (ask for 13 23 80)
**SMS relay:** 0423 677 767 (ask for 13 23 80)
**Email:** helpdesk@relayservice.com.au (ask for 13 23 80)

**13 QGOV (13 74 68)**
www.tmr.qld.gov.au | www.qld.gov.au