

Reid Highway Interchanges Project



Noise wall planning

What are noise walls?

Noise walls are physical barriers that are designed to reduce traffic noise for residential properties nearby busy roads. They are commonly installed as part of major infrastructure projects to protect community amenity.

How do noise walls work?

Noise walls reduce traffic noise by blocking and reflecting sound waves. Instead of sound travelling directly to nearby homes, it is deflected over and around the wall. The effectiveness of a noise wall depends on several key factors, including its height, length, location and the surrounding topography.

Why are noise walls needed?

Noise walls help:

- Protect community health by reducing long-term exposure to noise pollution
- Improve quality of life for nearby residents
- Meet environmental and planning standards
- Support urban development without increasing noise impacts.

What determines how effective a noise wall is?

Several factors influence the effectiveness of the wall:

- Height and length of the wall
- Proximity to the road and noise source
- Material and surface finish
- Topography of the surrounding area.













How are the location and height of walls determined?

Detailed noise modelling will guide where noise walls are placed and how tall they need to be. The modelling considers factors such as road layout, surrounding topography, vehicle types, traffic volumes and speed, road surface, road height, and the distance to nearby properties.

The final design, including noise walls and road surfacing, must meet noise limits set by State Planning Policy 5.4 (SPP 5.4). Once detailed design and further modelling are complete, noise wall locations will be confirmed.

What materials are used?

Walls are typically made from precast concrete panels supported by steel posts. Panels may include patterned, painted or anti-graffiti finishes. The colour and design will be in accordance with the overall urban landscape design for the project.

Will screen walls be included too?

In some locations, screen walls may be installed to maintain residential privacy, particularly where roadworks remove existing vegetation or structures that currently block views between homes and the road.

Will I be consulted regarding the location and design of noise walls?

Yes. If a noise wall is proposed along your property boundary, the project team will consult with you as part of the detailed design process. This engagement will be led by the project team.

Is the project likely to increase noise levels?

Significant increases in noise levels are not expected. In fact, smoother traffic flows through the new

interchanges may reduce noise associated with stopstart movements and heavy vehicle air braking. Additionally, new asphalt surfacing will result in a quieter road surface compared to what is currently in place.

Post construction noise monitoring will be undertaken at selected locations after the road upgrades are completed, and traffic patterns stabilised. These checks will confirm if noise walls or other noise mitigations installed meets the noise limits set by SPP 5.4.

What will happen to existing boundary walls?

Existing boundary walls will generally be retained unless design requirements mean they need to be removed to accommodate a new noise wall. If changes are required along your boundary, the project team will consult with you directly during the design process.

How to view the preliminary design

Preliminary noise wall locations are available on the project page at: mainroads.wa.gov.au/reid-hwy-interchanges

Please note, these locations are indicative only and subject to change as further technical assessments and detailed design takes place.

Further information

To stay up to date with the latest project information and subscribe to updates, visit:

mainroads.wa.gov.au/reid-hwy-interchanges

To contact the project team, call **138 138** or email **enquiries@mainroads.wa.gov.au**













