

Stephenson Avenue Extension Phase 2

What is a noise wall?

Noise walls are physical barriers, typically made using concrete panels, that are installed on major construction projects to reduce noise levels for residential properties adjacent to main roads with high traffic volumes.

Noise walls are not provided where commercial or public open spaces interface the road corridor.

How is the need for noise management determined?

The need for noise management is determined through noise modelling that identifies whether residential properties are likely to experience high levels of traffic noise in proximity to the project boundary, as defined in the Western Australian Planning Commission's *State Planning Policy 5.4 (SPP5.4) Road and Rail Transport Noise and Freight Considerations in Land Use Planning*.

How is location and height determined?

In line with SPP5.4, acoustic experts were engaged to undertake noise monitoring and assessments within the project boundary and at selected locations within close proximity of works.

Existing noise levels were recorded from the road as a baseline for forecasting future noise levels.

The noise model considers factors such as road geometry and topography, vehicle types, proposed traffic speed, future traffic volumes, road surface, the height of the new road and the distance between the road and the properties.

These assessments have been completed by the project and were used to inform the designs for the noise walls, which have now been finalised.

Who is responsible for maintenance?

The noise wall will be built within the road reserve area and Main Roads is responsible for the structural maintenance of noise walls and appearance, including the removal of graffiti.

Noise wall design

The project requires noise walls at the rear of Talia Drive, Telford Crescent, and along the Cedric Street northbound freeway entry ramp. This will provide residents on Talia Drive, Telford Crescent, and Hertha Road with an effective sound barrier from the noise of freeway traffic.

The walls will be built from a precast concrete panel and steel post design, similar to those located in various sections along the City's freeways.

Noise wall construction

Initial works include the installation of the noise wall footings. Noise wall posts and panels will be installed following this. Construction of the noise walls is expected to start in late 2023.

Construction of the new principal shared path (PSP) will follow the noise walls, with completion anticipated in 2024. These dates are dependent on weather, materials, and workforce availability.

Talia Drive

The existing limestone wall at the rear of Talia Drive will remain in place. A combination of elevated noise walls and full-length noise walls will be constructed in this location.



Example of an elevated noise wall

The top of the elevated noise wall built on the boundary next to the existing limestone wall will have transparent acrylic screening to allow light to pass through. The acrylic screening will be tinted to discourage bird strikes.



Example of a full-height noise wall

A new principal shared path (PSP) will be constructed directly behind the new wall. The combination of elevated noise walls, full-height noise walls and landscaping will create a pleasant journey experience for PSP users while ensuring passive surveillance of users from the freeway.

Connection points to new PSP

Openings in the wall must be created to allow pedestrians and cyclists access to the new PSP and enable passive surveillance. These openings do not reduce the effectiveness of the noise wall.

Access points at Telford Crescent will be retained and new access points will be established at the new Stephenson Avenue extension and Stirling Train Station.

Further information

If you would like further information, provide feedback, or have any questions or concerns, you can contact us at 138 138 or email: enquiries@mainroads.wa.gov.au

You can also subscribe to receive updates directly to your inbox by registering your email on the project's webpage at: www.mainroads.wa.gov.au/stephenson-ave-extension