

# ENVIRONMENTAL OVERVIEW

## Stormwater treatment

- Stormwater treatment methods are currently being investigated to manage water run-off from the motorway and may include installing soft structures such as ponds, swales or wetlands
- A swale or bioswale is a landscaping element designed to remove pollutants and silt from water run-off before it reaches our waterways

## Waterways

- Key environmental areas of interest within the project area are the Puhinui Stream, Papakura Stream and Pahurehure Inlet
- Thorough investigations are taking place in these areas to establish existing water quality and existing plant and animal species currently living in the waterways

## Noise and vibration

- Noise and vibration testing will take place as part of the project
- New noise walls will be installed where necessary along the motorway corridor to reduce identified noise effects for neighbouring properties

## Urban design and landscaping

- The project area will be carefully planted and landscaped, mostly using native plants, shrubs and trees



*Swales and landscaping as part of the CMJ project in central Auckland*

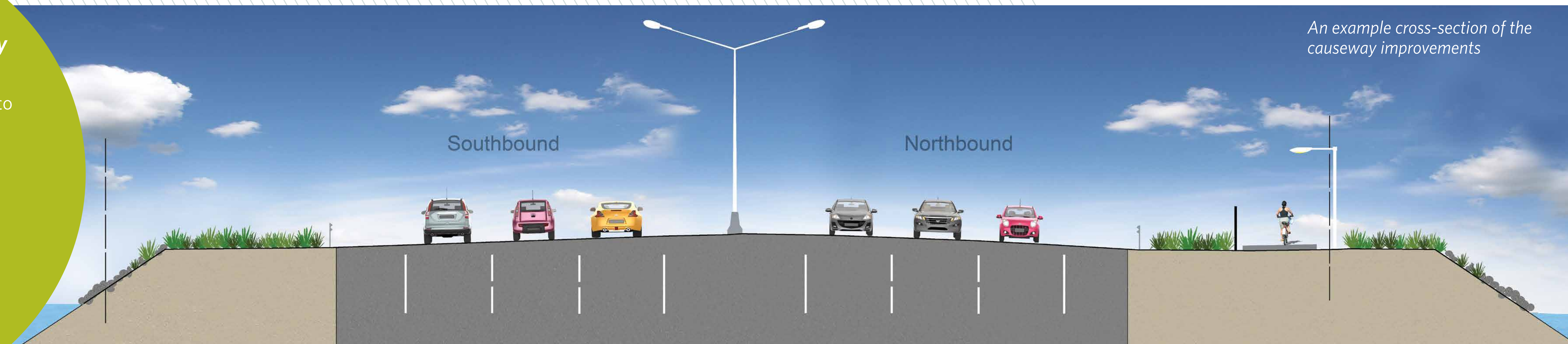


*Noise walls constructed as part of the Papakura Interchange upgrade*

## So what's happening to the causeway over the Pahurehure Inlet?

The existing causeway could be widened to accommodate:

- One additional lane in each direction
- Hard shoulder
- Stormwater treatment and landscaping
- Cycling and walking path
- Foundations for future raising of the causeway due to sea level rise



*An example cross-section of the causeway improvements*