

### CONSTRUCTION DUST

- An Air Quality Management Plan is being prepared as part of the Environmental Management for the project. This plan will outline how construction impacts related to air quality will be managed.
- Key strategies that will be implemented during construction to minimise the impact of dust generated from works associated with construction on nearby properties include:
  - constant monitoring of the project area will be conducted to identify times of increased dust generation and inadequate dust suppression
  - dust suppression of all unsealed trafficable areas, stockpiles and work areas to ensure dust generation is minimised. This may include the use of dust suppressants or water to ensure they will be sufficiently damp during working hours
  - erection of silt fences where required and the regular removal of silt from behind these fences and
  - removal and appropriate disposal of dust, soil and mud deposited on public roads from construction activities

### CONSTRUCTION NOISE AND VIBRATION

- Construction activities will be conducted in accordance with the Department, Energy & Infrastructure Framework for Management of Construction Noise and EPA requirements.
- The project team will provide advanced notice to property owners within close proximity to the works area, of any activities that are expected to generate noise and how these will be managed
- A Construction Noise and Vibration Management Plan has been prepared as part of the Environmental Management Implementation Plan (EMIP) for the project.
- Key strategies that will be implemented during construction to minimise the impact of noise include:
  - construction of the three metre high precast concrete patterned noise wall on the western side of South Road and installation of individual property noise mitigation treatments during stage 1 of the project
  - monitoring of noise levels to ensure construction noise does not exceed acceptable levels
  - scheduling work so that activities that generate excessive noise occur between the hours of 7am to 7pm, Monday to Saturday
  - where possible night work will be avoided, in the event that night work is required the project team will provide advanced notice to affected residents and
  - regular maintenance of plant and equipment to ensure performance at or above the industry expectations
- A suitably qualified consultant will be engaged to conduct vibration monitoring during construction activities that are expected to generate vibration and when construction activities are occurring close to high risk locations.

August 2007



## **NOISE**

- Measurements of the existing noise levels have been taken at twelve locations around the project area including residential and commercial locations on South Road, Grosvenor Street, Garfield Avenue, Tennyson Street and Mortimer Street.
- This information, in addition to traffic volumes was used to develop a three-dimensional computer model to compare the 2006 levels with the expected 2026 noise levels.
- A project objective is to ensure that properties within close proximity to the underpass do not experience increased noise levels as a result of this project.
- For properties predicted to experience an increase in noise levels without a noise mitigation treatment being introduced, noise reduction methods have been investigated. Approaches have been made to all affected, individual residential property owners, to discuss noise impacts and appropriate treatment options.
- A rear precast concrete fence of 3 metres in height will be provided for newly exposed residential properties on the western side of South Road and up to 2.1 metres of colour bond or similar fencing type, for residential properties on the eastern side of South Road (where a sufficient fence from a noise perspective does not currently exist).
- The urban design, placement and height of the noise walls have been given extensive consideration to ensure that they blend with the overall design for the underpass and are visually attractive.

## **VEGETATION**

- The project corridor is located in a highly urbanised area, with little or no remnant vegetation present. A full vegetation survey was conducted in December 2006 and January 2007 to identify the areas of vegetation within the project corridor.
- A Development Application for the removal or relocation of 21 significant trees has been approved by the Development Assessment Commission. Many of the trees are within private property and the project team have worked on relocating some trees.
- Currently the Department for Transport, Energy and Infrastructure has a one for one replacement policy for trees removed. The proposed landscaping of the South Road and ANZAC Highway intersection will include a number of replacement plantings (almost doubling the number of trees removed) and will contribute to the 'greening' objective of the South Road corridor.

## **BROWN HILL CREEK**

- Brown Hill Creek is a major channel for disposal of stormwater from a large catchment to the east of this project. Upgrades to the Brown Hill Creek culvert under South Road are proposed to increase the current capacity and reduce the risk of flooding in that area.
- The current alignment of Brown Hill Creek will not be altered as part of this project.

## **STORMWATER & GROUNDWATER**

- The current stormwater arrangements for South Road will be maintained with some minor alterations.
- A stormwater pumping station will be installed in the underpass to minimise the risk of flooding.
- Any groundwater in the vicinity of the underpass will be collected, treated and returned to the water table in the landscaped area to the south west off the intersection.

August 2007

