

9 Operation and maintenance of the Northern Expressway and Port Wakefield Road Upgrade

9.1 Operation of the Northern Expressway

Investigations are ongoing with respect to traffic management and control including incident management for the proposed Northern Expressway. Traffic management measures will be developed and documented during the detailed design phase and will ensure safe and efficient movement to the appropriate freeway standard.

9.2 Operation of Port Wakefield Road Upgrade

9.2.1 Traffic management and control

As part of the proposed upgrade of Port Wakefield Road, the following intersections will be under traffic signal control and managed by DTEI Metropolitan Region under the Adelaide Coordinated Traffic Signal System:

- Port Wakefield Road/Northern Expressway junction
- Port Wakefield Road/Waterloo Corner Road junction
- Port Wakefield Road/Bolivar Road junction
- Port Wakefield Road/Ryans Road junction
- Port Wakefield Road/Martins Road junction
- Port Wakefield Road/Salisbury Highway (east) junction
- Port Wakefield Road/Salisbury Highway (west) junction.

9.2.2 Surveillance and incident management

Through the introduction of extensive ITS systems including CCTV and/or detector loops, the operation of Port Wakefield Road will be able to be remotely observed. Where incidents or traffic activity warrants, the remote operation of traffic signals, VMS, CMS and VSLS will be able to be activated to control traffic speed and provide advance warning of issues to allow motorists to select an alternative route, allowing traffic signals to be controlled to service the major movements. Signals along Port Wakefield Road will be coordinated to assist the flow. Also refer to Section 7.8.17.

This surveillance and control will be managed via DTEI's Traffic Control Centre which provides this service across metropolitan Adelaide.

9.3 Maintenance of the Northern Expressway and Port Wakefield Road Upgrade

9.3.1 General methods and programming (DTEI responsibilities)

The maintenance of the road corridor will be the responsibility of the Metropolitan Regional Office of DTEI. Various road corridor elements are maintained under different regimes as outlined below:

Roadworks and road furniture (excluding lighting)

Roadworks and road furniture will be managed using fixed maintenance contracts. Maintenance intervention levels are set as part of the contract for items including:

- road pavement
- line marking
- raised reflective pavement markers
- kerbing
- verge and tree pruning
- roadside furniture (e.g. signs and barriers)
- stormwater pits and small culverts.

Large culverts and bridges will be maintained by the Metropolitan Regional Office of DTEI and inspected by the Pavement and Structures section within DTEI. A five-year rolling inspection regime determines the maintenance requirements and schedule.

Road lighting

The structure (poles and footings) and wiring are the responsibility of the Metropolitan Regional Office of DTEI and are undertaken by the Field Services team within DTEI. Maintenance is undertaken when reported. The luminaires are replaced by the local electricity owner and operator, determined as reported by DTEI maintenance or general reporting from the community.

Traffic signals

Maintenance at traffic signal infrastructure will be the responsibility of DTEI. There is a rolling program for inspection and cleaning of traffic signals.

9.3.2 Responsibilities of local councils

The project is responsible for the initial work undertaken to modify and/or upgrade parts of the local road network. At the completion, this work will be handed over to the respective council. Ongoing maintenance is the responsibility of the council.

9.4 Landscape maintenance

The success of the landscaping would be closely related to the effectiveness of implementation management and ongoing establishment maintenance.

During the first two years after planting, plants will be watered to aid their survival through the summer months. Water will be sourced consistent with water policy requirements of the time. Once plants are established, watering activities will cease and plants will rely on natural rainfall.

A weed control program will be implemented to ensure that weeds do not compete with the newly planted vegetation. Once the plants have become established, the main focus of weed control works will be on removing proclaimed and environmental weed species from the corridor. Grassed areas will be mowed on a regular basis to ensure they do not become a fire hazard.

If necessary, replacement planting may occur in areas where plants have not survived, in order to maintain the landscape design intent or to satisfy legislative requirements in regard to native vegetation.

