



Great Eastern Highway Bypass Interchanges Project

Great Eastern Highway Bypass and Roe Highway Interchange

As part of the Great Eastern Highway Bypass Interchanges project (the project), a new grade separated interchange at the intersection of Great Eastern Highway Bypass (the Bypass) and Roe Highway will replace one of the last remaining signalised intersections on Roe Highway. The new interchange will provide immediate journey time savings for over 60,000 road users on Roe Highway per day.

Interchange design

The formation of the new interchange between the Bypass and Roe Highway is known as a trumpet interchange. Trumpet interchanges are typically used where one highway terminates at another highway. It requires only one bridge and is the most traditional way of grade separating a three-way junction. In the early planning stages, it was decided a trumpet interchange was the best formation for this intersection, taking into consideration the traffic flow and physical constraints of the area, particularly neighbouring areas of Threatened Ecological Species.

What are the advantages of a trumpet interchange?

Key advantages of the trumpet interchange at this location include:

- Provides major improvements to the current intersection as it will allow for high-speed traffic, an uninterrupted traffic flow

and an improvement in direct navigation.

- Provides a greater flow of traffic off the Bypass ramp north and south bound onto Roe Highway
- Reduces congestion for commuters travelling north and south on Roe Highway
- The transition from the Bypass to Roe Highway will be much more fluid with construction of a 2-lane outer ramp heading north onto Roe Highway and two lanes merging into a single lane around the loop ramp onto Roe Highway Southbound.

Will trees and vegetation be removed as part of construction activities?

Construction of the Great Eastern Highway Bypass and Roe Highway interchange will require clearing of remnant native vegetation. Clearing will impact portions of Threatened Ecological Communities. Main Roads will obtain a Native Vegetation Clearing

Permit under Part V of the Environmental Protection Act (1986) prior to any clearing works. In addition, the project is being assessed by the Commonwealth under the Environment Protection and Biodiversity Conservation Act (1999) due to impacts on the Banksia Woodlands of the Swan Coastal Plain and black cockatoo foraging and potential breeding habitat.

Greater Connect Alliance is committed to minimising clearing requirements for the interchange and has done this through carefully considered design including:

- Steepened earthworks batters
- Keeping the road alignments as close as possible to existing ground and/or pavement levels
- Keeping drains within medians or areas already cleared wherever possible
- Minimising the width of the median over the interchange Bridge

Roe Highway and Great Eastern Highway Bypass Interchange

Midland Road

Great Eastern Highway Bypass

Underpass

Principal Shared Path

Roe Highway northbound

Roe Highway southbound

- Minimising land acquisition requirements by reducing the design footprint.

Significantly, by reducing the design speed limit for the Roe Highway northbound to GEHB westbound off ramp, GCA has realigned the off ramp to completely avoid the Threatened Ecological Community FTC20c (Shrublands and woodlands of the eastern Swan Coastal Plain).

Will there be paths on the interchange?

A new Principal Shared Path (PSP) will extend from the Great Eastern Highway Bypass and Roe Highway Interchange to join the section of PSP north of Kalamunda Road which was constructed as part of the Roe Highway and Kalamunda Road Interchange project. This extension will complete the missing link in the 30km PSP along Roe Highway, between Great Eastern Highway in Midland and Kwinana Freeway in Jandakot. A new PSP will also be built along the northern side of the Great Eastern Highway Bypass from Roe Highway to just west of the existing railway bridge where it will join the local footpath network.

More information on the Principal Shared Paths being constructed as part of this project is available in the Shared Paths Fact Sheet.

How will traffic be managed during construction of the interchange?

A detailed Traffic Management Plan will be developed for all works impacting the road network including the Great Eastern Highway Bypass and Roe Highway Interchange. Current traffic flows will be maintained in both directions with travel time monitored throughout the construction period. Access will be maintained for emergency services and private properties at all times during construction.

Reduced speed limits and temporary lighting will be in place around the works and maintained throughout construction of the interchange. Any changes or additions to traffic management will be communicated to road users in advance.