

Overpass simplifies access to Darwin Port



Construction of the \$17 million Berrimah Road – Rail Overpass, Stage 3 of Darwin’s multi-million dollar Tiger Brennan Drive project, is underway.

Tiger Brennan Drive (East Arm Port Access Route) is a Northern Territory Department of Lands and Planning-owned road that caters for about 34,000 vehicles travelling each day between Darwin, the city of Palmerston and surrounding rural areas.



Above left: Road Train collects fill from blast site. **Above right:** Bridge will overarch the piles and parallel the busy detour road. **Below left:** Freight train rolls between the piles. **Below right:** Workers assemble an abutment wall.

The 14 pile overpass and upgrade of 1020 metres of the road will include:

- New pavements constructed on the approaches to the bridge and across the overpass, with installation of service sleeves to carry utilities. All works will be synchronized with the assembly of the bridge deck.
- Erection of safety barriers concurrent with the bridge and pavement works, bituminous road surfacing, line marking and installation of street lighting and traffic control devices. Preliminary works on the precast, prestressed concrete bridge planks began in May 2011.

The four lane (two-way) road bridge, spanning 14.1 metres, can accommodate six traffic lanes if the nine-metre wide median is removed in the future. The existing road will be straightened slightly and elevated 350 metres to the north and 670 metres to the south.

The overpass is designed to last a minimum of 100 years. The largest load the bridge is designed to carry is a heavy load platform trailer fully laden to 400 tonnes. The bridge road will have a three per cent grade to allow road trains to accelerate and brake effectively.

The self-supporting Mechanically Stabilised Earth abutment end walls will be tied into the fill by metal straps. Coarse rock blasted at Tiger Brennan Drive will be used

on the sides of the embankments to stabilise the slopes. These batters will be spray seeded at the end of the project to counter erosion and enhance their visual appeal.

Traffic will be detoured during construction onto a newly bituminised road paralleling the existing Berrimah Road. It will act as an emergency detour when the project is completed. Train movements will not be affected by the works. The refurbished Berrimah Road is expected to reopen to traffic at the end of 2011.

Aurecon Australia designed the project and the construction has been awarded to Macmahon Contractors.

It is managed by the Northern Territory Department of Construction and Infrastructure.

