Dalrymple Road Bridges, Townsville

Case study – Prestressed deck units, Prestressed piles and Large box culverts
**Humes delivers cost-effective bridge components in time for Townsville's wet season**

The Dalrymple Road Bridges project comprised of a new bridge structure where Dalrymple Road crosses the Bohle River, as well as construction of a second bridge over the adjacent overflow channel on the western side of the Bohle River. Both bridges were designed to accommodate a one in fifty year flood event. A large box culvert structure was also included in the drainage design.

Dalrymple Road is one of the principal roads linking Townsville's CBD and the Port of Townsville to the rapidly growing Northern Beaches community, the Bruce Highway and the Townsville Ring Road.

During Townsville's monsoonal wet season, the previous low level crossing used to become inundated with fast flowing water, resulting in lengthy road closures, with traffic diverted to local, collector and arterial roads. This caused congestion, time delays and frustration for motorists.

The frequent inundation of the road also meant the road pavement was at high risk of significant and costly damage. The new crossing provides a safer transport route for the travelling public using one of Townsville's major roads.

Humes delivered a timely and cost-effective prestressed solution for the two new bridges.

The first bridge involved the supply of 98 prestressed piles and 205 prestressed decks (five spans). For the overflow channel bridge crossing Humes supplied 111 prestressed piles and 246 prestressed deck units (six spans). Humes also supplied 39 large box culverts and 26 Linkslab® units for this Townsville City Council project.

In order to meet the project’s tight production timeframe of construction before the 2015-16 wet season, Humes joined its manufacturing businesses in Townsville and Rockhampton, supplying the prestressed elements from both sites. With each unit built to unique specifications, the supply of products from two factories required thorough planning and coordination.