

# Killymoon & Sheep Station Creek Bridges



**Client:** Queensland Rail  
**Completed:** June 2016  
**Value:** \$5.03M

THIS PROJECT INVOLVED THE REPLACEMENT OF THREE TIMBER RAIL BRIDGES ON QUEENSLAND RAIL'S NORTH COAST LINE. WITH CROCODILE INFESTED WATERS NEAR SHEEP STATION CREEK AND A SIMULTANEOUS LIFT USING NINE CRANES AT KILLYMOON CREEK, THE PROJECTS WERE UNIQUE IN THEIR OWN RIGHTS.

## THE PROJECT

### KILLYMOON CREEK

The Killymoon Creek Bridge is located approximately 28 km south of Townsville and forms part of Queensland Rail's North Coast Rail Line. This part of the scope of works included the construction of a two by fifteen metre span bridge. With works being completed over significant waterways, the environmental planning of this project played a key role in its successful completion.

### SHEEP STATION CREEK

This part of the project included the replacement of two timber bridges on-line at Sheep Station Creek and Sheep Station Creek Overflow on the North Coast Rail Line. The bridges are located northwest of Ayr in Queensland. The Sheep Station Creek bridge stands in permanent water, while the second bridge is within the overflow area. Unlike Killymoon Creek, the Sheep Station Creek Bridge replacements entailed the design and construction of the structures. The main bridge composed of the following span lengths:

- 1 x 10.7m
- 2 x 8.8m
- 2 x 7.3m

The bridge over the overflow was 1 x 8.8m and 1 x 7.3m spans. Crocodile sightings were not uncommon within the area of this construction site, so extra safety precautionary measures were implemented to safeguard all of the people on site.

### CHALLENGES

With a reef-net cable passing through the creeks, careful consideration was given to any digging and piling works within the vicinity of the structures.

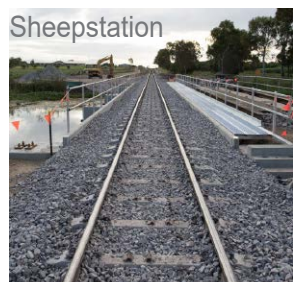
Both bridges included a significant amount of civil works to be conducted within short deadlines.

Effective communication with the client and excellent cooperation with Queensland Rail as well as other key stakeholders ensured potential delays could be mitigated. Having experienced VEC personnel on-site throughout the project ensured the program was adhered to and there were no program delays.

### INNOVATION & EXCELLENCE

A key lesson learnt on this project was to involve all service providers in an early stage of the works. With early planning and effective communication prior to the commencement of works on site will enable the team to work even more efficiently.

At the Killymoon Creek site, our team used nine cranes to lift an entire section of rail to relocate it to its new alignment. This simultaneous lift meant that the works could be conducted quicker, alleviating the need for additional cuts and re-welds to place the track back into place. This meant the program could be significantly reduced to complete the works in the tight track closure period of 48 hours.



Sheepstation



Killymoon



Killymoon



Killymoon