

# New Fitzroy River Bridge Project

**Bridge design approaching completion with construction to begin in early June**



**Above:** *New Fitzroy River Bridge artist impression*

## **New Fitzroy River Bridge**

Due to the devastation caused by Ex Tropical Cyclone Ellie in December 2022, the old Fitzroy River bridge was damaged beyond repair. The road approaches (on the eastern side of the Fitzroy Crossing townsite) also sustained significant damage, cutting access to Aboriginal communities east of Fitzroy Crossing as well as the East Kimberley and Northern Territory.

Design work for a new bridge commenced in late January and is approaching completion. The new bridge will be:

- 268 metres long – almost 100m longer than the old bridge
- 12.4 metres wide – to include two lanes and a shared path for pedestrians and cyclists

- Six times stronger than the old bridge, to withstand future flood events

The bridge will be supported by four concrete-filled steel piles at each of the seven piers, driven more than 30 metres into the ground. By comparison, the old bridge was supported by two steel piles at each pier driven to a depth of 12 metres.

Construction is on track to begin in early June, with the new bridge expected to be operational by mid-2024.

## Meet the Bridge Team

On 29 March, the Minister for Transport announced that the Fitzroy Bridge Alliance, comprising Georgiou, BMD Constructions and BG&E would partner with Main Roads to deliver the new Fitzroy River Bridge.

The team has extensive experience in delivering major bridge projects in WA and has the capacity and capability to deliver this project in the shortest possible timeframe.

Following an accelerated planning process, the first members of the team arrived in Fitzroy Crossing in mid-April and hit the ground running. More team members will arrive on site over the coming weeks as the project ramps up.

## Preparatory works

In preparation to build the new bridge, the team has been preparing its construction methodologies as well as developing the design to ensure the bridge is constructed to withstand future flooding events.

The Cone Penetration Testing (CPT) and bore rigs arrived on site in late April to undertake geotechnical investigations, which will test the ground conditions in the construction area and verify the bridge design assumptions. The rigs will be on site conducting testing until late May.

Earthwork equipment will continue to arrive on site during May. In late April, the team cleared the area on the west side of the bridge. This area is being used for material laydown, offices, crib rooms and parking. The area for the construction village, which is located 9km west of town, has also been partially cleared, to leave as many trees as possible.

The surveying team arrived on site in late April and will continue working during May to peg works areas, clearing extents, the construction causeway and the footprint required for the new bridge. The underground service locating team has also started detecting and marking services such as water and power, which will allow the bridge team to plan for and avoid these during construction.

## Underground cabling

During May, water and communication services providers will be undertaking drill shots under the river, enabling the reinstallation of cables and pipes between the east and west embankments.



**Above:** Laydown yard on the west side of the river

## Bridge construction lookahead

Due to the need to build this bridge quickly and safely, some activities may be undertaken concurrently, and the timeframes may crossover.

### Construction causeway

A temporary causeway will be built adjacent to the bridge site. This will allow construction equipment such as drill rigs and cranes easier access to the full length of the bridge. Work on this construction-only causeway has commenced and should be completed by the end of the month.

### Old bridge demolition

Towards the end of May, the old bridge will be demolished. This work will take between two and three weeks to complete. The team are working with the demolition crew to develop a methodology to deconstruct the bridge and remove the materials without harming the river and riverbanks. The old bridge material will be crushed into small pieces and used within the construction of the causeway, as well as recycled for use in the Fitzroy Valley.

### Bridge pier preparation

Sixty-eight bridge pile casings, approximately 21 metres long and 1.2 metres in diameter, are being fabricated in a workshop and trucked to site – one casing per truck. Six casings have already arrived on site. The remaining casings will arrive by early July.



**Above:** Steel pile casing making its journey to site

Steel reinforcement cages to go in the casings are also being fabricated in a different workshop and trucked to site. 102 cages, between 12 and 15m long, will start to arrive on site from early May.

Along with concrete, these materials form the basis of the new bridge piers. The construction of the piers will be staggered, one pier constructed at a time, in situ, to ensure materials are not stockpiled in the laydown yard. The bridge design has thirty-four piles which will be driven into the ground. Each pile consists of two pile casings which will be welded together on site and infilled with concrete. Local residents may experience some noise and vibrations during this time.

## Employment and business opportunities

The project team is committed to providing opportunities in employment, training, skills development, and business growth for the Fitzroy Valley community. The team has been engaging with the local language groups and working with them to identify openings and opportunities.



**Above:** The Alliance Director attending the community meeting in Fitzroy Crossing

### Employment

The team is in the process of identifying roles on the project and will soon go out to the community to seek their interest. Some of the opportunities available include operators, tradespeople, steel fixers, kitchen hands and administration staff. The team will also provide training and mentoring support to assist in skills development and future employment opportunities.

## Business

There are many sub-contractor and supply opportunities on the project for local businesses to be involved in constructing the bridge, running the camp and supply of materials. The team is working with local organisations to identify these businesses and is seeking interest from businesses in the surrounding areas. The team will also help guide local businesses in the right direction for future work in the Fitzroy Valley and the wider Kimberley Region. Businesses who are interested in opportunities are encouraged to go onto the Main Roads project page <https://www.mainroads.wa.gov.au/new-fitzroy-river-bridge/> and fill out an EOI form under *Procurement* and email it to [enquiries@fballiance.com.au](mailto:enquiries@fballiance.com.au)

## Further information

For more information about the project, please visit the Main Roads project page <https://www.mainroads.wa.gov.au/new-fitzroy-river-bridge/>, email [enquiries@mainroads.wa.gov.au](mailto:enquiries@mainroads.wa.gov.au) or call 138 138.