

Tonkin Gap Project and Associated Works

The end of the line in sight



Tonkin Highway speed limit reinstated to 100 km/h

The wait is over for our stakeholders, commuters and communities in and around the Tonkin Gap Project. And while there will be a little more disruption to go, as the METRONET Morley-Ellenbrook Line is being completed, motorists are now experiencing a much quicker and smoother journey.

The additional lanes from Dunreath Drive to Collier Road have been opened and in a boon for cyclists so too has the Principal Shared Path allowing people to ride from Mandurah to Muchea without crossing a road.

The project, which started construction in November 2020, is now complete including all final asphalt laid and road markings. As usual, there is a period where inspections and closing out defects takes place, with landscaping also ongoing.

Fast-tracked to support WA's COVID-19 economic recovery, the project included widening Tonkin Highway to provide new lanes in each direction from Dunreath Drive to Collier Road, new bridges over the Swan River, Dunstone Road, Guildford Road, Railway Parade and a new fully grade-separated Principal Shared Path on the western side of Tonkin Highway from north of the Guildford Road interchange to Stanton Road.

Closing the 'Tonkin gap' saves up to six minutes during morning peak and up to 11 minutes during afternoon peak for around 120,000 road users who use this section of Tonkin Highway.

Milestone timeline

Mid 2023

- Opening of new Mooro-Beeloo (Redcliffe) bridge traffic lanes
- Northern dive structure (near Marshall Road) complete
- Tonkin Highway northbound and Collier Road and Benara Road final alignment complete
- Eastern noise walls on Mooro-Beeloo (Redcliffe) bridge complete
- Malaga footbridge design unveiled
- Aboriginal artwork on Great Eastern Highway underpass complete

Late 2023

- Redcliffe Bridge renamed to Mooro-Beeloo bridge
- Tonkin Highway opened to three lanes in each direction between Dunreath Drive and Collier Road
- Heritage trail and DBCA River Journeys' information signage opened to the public
- Aboriginal artwork on Guildford Road underpasses complete
- Principal Shared Path (PSP) connection between Mooro-Beeloo bridge and Collier Road opened
- Completed Benara Road pedestrian underpass structure and Noranda Station drainage works

Early 2024

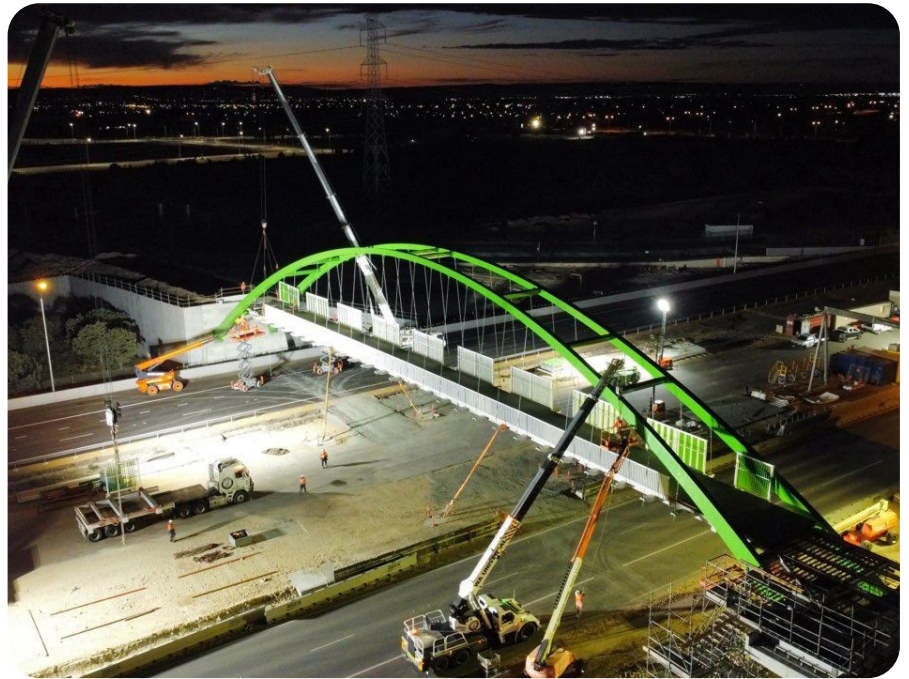
- Speed limit reinstated to 100 km/h on Tonkin Highway between Dunreath Drive and Collier Road.
- Malaga footbridge arch segments and bridge deck installed
- Opened BMX track and Mountain Bike Skills facility under Mooro-Beeloo bridge

Mid 2024

- Complete Morley Station multi-storey carpark structure
- Complete Malaga footbridge structure
- Reinstate Tonkin Highway speed limit between Collier Road to Hepburn Avenue to 100 km/h
- Complete Selby Park works
- Revegetation works continue through winter
- Complete Broun / Embleton intersection works

Works will continue further north as part of the METRONET Morley-Ellenbrook Line. The Tonkin Gap Project, tasked with delivering enabling works for the project has completed dive structures for trains to enter and travel along Tonkin Highway median, reinforced existing bridge piers in the median, removed and rebuilt a road and bus bridge at Broun Avenue, constructed new rail bridges over Morley Drive, built station platforms for Morley and Noranda Stations, built a pedestrian underpass in Noranda and more.

By mid-2024, a 400-bay multi-storey carpark structure at Morley Station will be ready for final fit-out along with the new footbridge over Tonkin Highway, which will provide access to Malaga Station. These structures will remain non-operational until completion of the METRONET Morley-Ellenbrook Line, anticipated for late-2024.



Malaga footbridge over Tonkin Highway

Underbridge activation

Early in the project's life, Main Roads identified an area under the Mooro-Beeloo Bridge, on the City of Bayswater side, for enhancement. Liaising with the City of Bayswater and other State Government agencies a plan was developed for the site.

After a comprehensive consultation process with the local community and stakeholders, the once barren wasteland has been transformed into a vibrant space with a BMX track and a mountain bike skills area for people of all ages and abilities to enjoy. We have also completed a new heritage trail that takes in significant points of interest along the path, such as the new underpass artworks, heritage, yarning circle, local plants, and animals.

A community celebration officially opened the space in April with pump track coaching workshops, jump line demos, jam sessions and more. The all-weather friendly facility has showcased the opportunities to turn underutilised spaces into active ones.

On the southern side of the river, we have established an interpretation node near the bridge which forms part of the Department of Biodiversity and Attractions River Journeys' program. For this node, we conducted heritage surveys, and two sites of Aboriginal cultural significance were identified within the works area which now form part of the signage.



BMX track & mountain bike skills facility opened under Mooro-Beeloo bridge

Renaming of Redcliffe Bridge



The change of name from Redcliffe Bridge to the Mooro-Beeloo Bridge corrects both a geographic misnomer and reflects the importance of the area to Traditional Owners.

Due to local government locality changes since it was first built in 1988 the bridge is no longer in Redcliffe. It now connects the suburb of Ascot (City of Belmont) to Bayswater (City of Bayswater).

The widening of the bridge as part of the Tonkin Gap Project and Associated Works presented an opportunity to rename the bridge in support of cultural identity and connection to Country through place naming.

To arrive at a new name, the Project team consulted Whadjuk Traditional Owners to understand more about the area's Aboriginal heritage.

In June 2022, the Tonkin Gap Alliance conducted a workshop which was facilitated by Ethnoscience, an Aboriginal heritage consultancy. This workshop provided options for a new bridge name, ultimately selecting Mooro-Beeloo.

Mooro-Beeloo refers to traditional territory names, both north and south of the bridge. At the time of colonisation, the northern side of the Swan River (Bayswater) was known as Mooro country. Yellagonga was recognised as the leader of Mooro country. The southern side (Belmont) was known as Beeloo country and Munday was recognised as the leader.

Tonkin Gap flexes its sustainability muscle

From enhancement of heritage values to the use of recycled construction materials, the Tonkin Gap Project has utilised a wide array of methods to address sustainability.

Last year the Tonkin Gap Alliance was awarded a Gold Infrastructure Sustainability (IS) design rating from the Infrastructure Sustainability Council (ISC).

The Gold rating means Tonkin Gap Alliance (TGA) has successfully adopted sustainable approaches to drive social, cultural, environmental, and economic benefits in the design phase of the project.

At the time, Main Roads Principal Project Director Rob Arnott congratulated the TGA team on the achievement, saying it was a well-deserved result for its "excellent and dedicated approach."

"The team has implemented four Australian firsts in the construction phase with each making a valuable contribution to the project such as reducing the amount of waste," he said.



Tonkin Gap team receiving the Sustainability Achievement Award

"One example of these firsts is using incinerator bottom ash aggregate (IBAA) from waste-to-energy plants in retaining wall blocks. The aggregate is combined with recycled construction and demolition waste and then fashioned into retaining wall blocks, a good alternative to virgin limestone blocks."

Each block contains the incinerated by-product from 105 standard 240 litre "wheelie" bins, eliminating emissions associated with household waste in landfill and reducing the use of virgin limestone material.

More recently the project received the Sustainability Achievement Award at the Civil Construction Federation (CCF) WA Industry and Training Awards. This award recognises excellence and/or innovation in sustainability (including the recycling and reuse of materials) by a company active in the Western Australia civil construction industry.

In terms of Aboriginal participation, one of our measures for social outcomes, we have significantly exceeded our initial target of \$10 million spent with Aboriginal businesses. Recent figures have that total at around \$30 million.

Green gift for local organisations

Our large planting program has resulted in some extra tube stock going to Redcliffe Primary, City of Belmont and City of Bayswater.

The project team was able to gift the plants left over from the revegetation work in 2023. Across the project, a total area of 29.1 hectares will be revegetated. Planting began during winter 2022 and it will continue to progress throughout the year.

A mix of native plant species are being used for the replanting and these plants help provide shade, protection, and habitat for native animals, provide visual screening for residents, prevent soil erosion and improve the overall attractiveness of the area.

Planting will continue during the 2024 winter period.



Tonkin Gap's Engineer Pablo Islas with Redcliffe Primary School's Principal, Mark Hendon

Aboriginal artwork in the underpasses

Three separate underpasses have been adorned with Aboriginal art, two at Guildford Road and one at Great Eastern Highway.

The Guildford Road underpasses were designed and delivered by young talented artists Peter Farmer Junior and Kayley Emery.

Peter included lots of Boyi (long neck turtles) in his underpass design as these are a strong and healthy Totem that signifies health and wellness, for not just the river, but also for the Traditional Owners and all who live here.

In Noongar culture Maali (Black Swan) represents the strength of family and community, which is why Kayley included it as a feature in her artwork. The linework around the Maali represents the Derbarl Yerrigan (Swan River) and the significant cultural journeys throughout the river system.

The Great Eastern Highway underpass was created by Karrak Designs and features animals endemic to the area as well as colours associated with each of the six Noongar seasons.

Main Roads Principal Project Director Rob Arnott said the project's Whadjuk Working Group had been an integral part of the Tonkin Gap Project delivery team.

"From the initial identification of two culturally significant scar trees by the river's edge, to assisting in choosing the new name for the bridge, the group has provided sound advice and direction across many facets of the project," he said.

Artwork on a pier at the newly built and renamed Mooro-Beeloo Bridge was also completed by Karrak Designs.



Kayley Emery with her completed artwork of the Maali



Korrine Bennell-Yarran and Dellas Bennell from Karrak Designs with their completed artwork at Great Eastern Highway underpass

Kevin's "Gap years" in focus

On the verge of completing work on Tonkin Gap Project and Associated Works we caught up with **Associated Works Delivery Manager Kevin Garry**.



Kevin has been with the project since day one, in June 2020. In that time, he has seen a worldwide pandemic come and go, a change in Government in Canberra and large construction projects having to compete for a scarcity of skills and resources.

But for the entire time Kevin has been based at the main site office or Lot 2, Bayswater, which has been a central point for much of the "associated works", overseeing the enabling works for METRONET'S Morley-Ellenbrook Line .

This has included oversight on some of the project's more complicated structures: the northern and southern dives (to accommodate the rail line); the Broun Ave bridge demolition and construction of the new, much larger bridge.

His duties have included liaising with the various project leads and superintendents' day to day on key program issues and progress.

"In addition, I sit on various management meetings such as the Project Leadership Team and the MELconnx (the consortium chosen to build the Morley-Ellenbrook Line) interface and provide input for our end of month reporting," he said.

"This reporting ensures targets are being met and any issues arising are dealt with effectively."

Kevin has loved getting to work each day seeing the progress on Tonkin Gap.

"Completion of the dive structures and the corridor works, culminating in handover of these to MELconnx has been very pleasing," he said.

The advent of COVID in early 2020 presented many challenges. Although construction was considered critical

and work was allowed to continue, the pandemic still had a big impact.

Kevin said the challenges included managing the impacts of personnel needing to isolate while trying to maintain progress and program on site.

"The continuous monitoring of an ever-developing situation required resourcing and a need for the leadership group to react quickly and decisively to keep a project of this size moving forward," he said.

He said keeping the project on track and hitting key milestones had always been a great boost to team morale.

The Tonkin Gap Project has been delivered by the Tonkin Gap Alliance, comprising Georgiou Group, BMD, WA Limestone, BG&E and GHD, with Main Roads Western Australia and the Public Transport Authority. Kevin, who works for BMD, said he enjoyed the alliance approach to the project.

"It's very collaborative and it has been a nice change to look at contracting through a 'one team' lens," he said.

"Working on this project has been made most enjoyable by the sense that the alliance was one cohesive team."