

Swan River Crossings Project

Frequently Asked Questions

What is the Swan River Crossings project?

We are replacing the Fremantle Traffic Bridge.

The bridge was built in 1939 and has been deteriorating over several years. Despite extensive strengthening and maintenance work, it needs to be replaced.

We will be building a new four lane traffic bridge with new paths for people walking and cycling and a new dedicated passenger rail bridge. Both bridges will be located between the existing Fremantle Traffic Bridge and the current rail bridge.

What stage is the project at now (July 2022)?

Design development is continuing and will be progressed to detailed design and approvals, with a final design anticipated later in 2022.

How is the project being delivered?

The Fremantle Bridges Alliance (FBA) was formed to continue project development activities

to design and deliver the new traffic and rail bridge infrastructure. The Alliance is made up of Main Roads, Laing O'Rourke Australia Construction, Arup Australia, and WSP Australia.

Can you maintain the current traffic bridge?

Since the bridge was opened in 1939 Main Roads has undertaken extensive maintenance and repairs, however, it has come to a point where the repairs require replacement of key structures.

The existing bridge is not completely authentic, nor in its original state with many of the superstructure and substructure elements repaired or replaced with steel and concrete.

The biggest risk to the traffic bridge is being hit by a vessel and not sustaining the force of impact.

Given the level of corrosion and rot in the structure, plus the risk of impact by a vessel, Main Roads will not be retaining the

current bridge. More information is available in our Bridge Condition fact sheet [here](#).

Did Main Roads investigate converting the traffic bridge into a bridge for pedestrians and cyclists?

Yes, we considered repurposing the existing bridge as a pedestrian and cyclist path only. One of the key issues with the bridge is its height above the water, which significantly restricts the navigation of boats passing underneath.

Solving this problem would require inserting a significant steel structure in the middle of the bridge, to provide the necessary navigation span and height for larger vessels. Whilst possible, it is not considered financially feasible.

Retaining a pedestrian and cycling bridge after building two new bridges would create four bridges at one location and complicate river navigation. Engagement with Whadjuk Nyoongar Elders has identified

a desire to limit the number of structures built in the river which impact river flows.

Will you re-use the timber or remnants from the current bridge?

Where possible we will use remnant parts and relics of the old bridge. We are working closely with a historian and a public art consultant to understand the previous bridges and how we interpret these in the new design.

Will the colourful container bow need to be moved?

Yes. Discussions with the artist who created the container bow and the City of Fremantle have started.

What will happen to the Ferry Capstan?

The Ferry Capstan base is a structure historically used to haul river vessels by manual labour, which is no longer practised. The capstan will be buried within the approach embankment on the south. Acknowledgement of the buried location of the Ferry Capstan is proposed to be identified in the design on the southern abutment of the new traffic bridge.

Heritage

Is the Fremantle Traffic Bridge heritage listed?

The Fremantle Traffic Bridge is heritage listed. We continue to

engage with the Heritage Council of WA to ensure heritage values are respectfully integrated within the Project's urban design.

How is the project considering Aboriginal culture?

We are working closely with Whadjuk Nyoongar Elders. The Derbarl Yerrigan (Swan River) has great significance to Nyoongar people, with song lines and spirits flowing through the river.

The Project's Whadjuk Elders' Advisory Group has told us how piers in the water disrupt this sacred flow. While the existing Fremantle Traffic Bridge has 26 piers in the water, the new bridge is anticipated to only have three.

The new alignment at the southern end of the Fremantle Traffic Bridge will create opportunities to acknowledge the rich cultural history of Walyalup through artwork, placemaking and landscaping features.

How is the heritage value of the bridge being considered?

Main Roads is considering the heritage values relating specifically to the location of the Swan River crossings, the various iterations of crossings there, the current heritage-

listed bridge, and the local history of crossings.

Consultation with numerous stakeholders has been underway since 2019. This will be the fifth bridge built at this location, highlighting the significance of the crossing point itself.

Will you retain a remnant portion of the current bridge?

The current concept does not retain structures of the existing bridge. Opportunities to retain some remnant piles at the northern end are being explored as a part of the interpretation of all the previous structures and traditional Aboriginal crossing points.

The new traffic and rail bridges

Will it be easier to navigate under the new bridges?

The new and higher bridge will have less piers in the water and improve navigational clearances for yachts, boats, emergency services and will have the capacity to accommodate larger vessels for tourism initiatives.

What is the navigational clearance under the new bridges?

Navigational height of the new road and rail bridges will be 9m, which is 2m higher than the current traffic bridge. This change will result in the existing

rail bridge having the lowest navigational clearance on this stretch of the Swan River of 8m.

Do we need a new rail bridge?

Currently, freight and passenger services share one rail bridge. This limits the amount of freight that can be moved on rail.

The project will build a new rail bridge exclusively for passenger trains, which means the existing one can be dedicated to freight, significantly improving current capacity and efficiency.

The benefits of a new dedicated freight track are:

- Increased rail freight capacity during the day, as freight trains are currently restricted to operating outside peak passenger morning and afternoon periods.
- More capacity to place freight on rail which would otherwise be transported by trucks on roads. The dedicated freight rail line will effectively remove nearly 400,000 truck movements per year or nearly 1100 truck movements per day.
- Better port access, enabling exports to reach international markets which is critical to the State's ongoing economic prosperity.

Why are you building a new rail bridge if the port is moving to Kwinana?

The current rail bridge is shared between freight and passenger trains. Building a new passenger rail bridge will separate rail traffic and allow for more freight to be transported by rail while Westport is progressed, taking more trucks off suburban roads.

The Alignment

How was the alignment for the new road and rail bridges chosen?

An Alignment Options Assessment in 2021 involved high level technical studies to determine the feasibility and constructability of four alignment options plus a comprehensive program of consultation and engagement with community and stakeholders.

During consultation participants expressed a preference for placing the new bridges between the existing road and rail bridges. This alignment was confirmed for development in August 2021.

What was considered when choosing the alignment?

The assessment considered the following key areas:

- design – road and rail design compliance and connectivity

- constructability – programming, staging and space consideration
- design quality – placemaking, urban design and architecture
- environmental and heritage – statutory requirements
- road (including pedestrians and cyclists), river and rail operations – impacts on stakeholders during construction and at completion.
- value for money.

Main Roads said there is not enough room to build between the existing bridges, what changed?

There is limited space available between the existing road and rail bridges, with 'pinch points' on the northern abutment. Focused efforts challenged previously accepted technical requirements and assumptions to determine what can be built in the available space.

With construction staging, design innovations and recently available technical data (such as geophysical results) technical specialists identified an optimised cross-section that can be built; however, this solution increases the duration of the construction program.

Southern Alignment

Why have you reduced Canning Highway to two lanes?

- We are changing the Canning Highway intersection with Queen Victoria Street.
- Removing the traffic lights means traffic can continue to flow without stopping and queuing at the signals
- No stopping and queuing at the signals mean two lanes in each direction are not needed
- This allows extra space to realise landscaping and design opportunities and improved pedestrian crossings
- The signals between Canning Highway and Beach Street will be prioritised for Canning Highway/ Beach Street movements.
- Port vehicles will trigger a signal to allow them to enter and exit the port.

Currently, traffic reduces to one lane closer to Fremantle – this brings the calming of traffic further and creates a better urban environment at the entry to Fremantle.

Why is Canning Highway going under the traffic bridge?

The project provides a new and direct connection to Fremantle via Queen Victoria Street while enabling a future direct

connection into Victoria Quay from Canning Highway to cater for Inner Harbour redevelopment. It also realises a community aspiration for a new space for the people of Fremantle

Does the new southern alignment allow for better access to The Naval Store?

The concept design for the new alignment will see the removal of the signalised intersection at the southern end of Fremantle Traffic Bridge to allow for uninterrupted, free flowing traffic into Fremantle along Queen Victoria Street.

Canning Highway will be realigned from East Street to run under the new Fremantle Traffic Bridge to connect with Beach Street. This will create a generous open space in front of The Naval Store for community benefit. Vehicle access to The Naval Store will be maintained via Tuckfield Street.

With Canning Highway travelling down towards the river, what happens to the grass and trees on the hill?

Canning Highway moves from its current alignment at East St, and transitions to the level of Beach Street under the existing traffic bridge. Where impacted, the non-native vegetation will be removed. The Urban and Landscape design has identified the opportunity to revitalise the

area by reintroducing native vegetation and celebrating the Aboriginal and European heritage of the area. More information about the design will be released as design progresses.

New cycling and pedestrian paths

How wide are the new paths compared to the existing one?

The new traffic bridge includes a 3-metre-wide shared path on the east and a 4-metre-wide Principal Shared Path (PSP) on the west. The current path is shared by all users and is only 1.7m wide

What about the path from North Fremantle Station?

The project includes building the next stage of the Fremantle Principal Shared Path (PSP), connecting North Fremantle Train Station to the Swan River.

The PSP will be located within the existing rail corridor of the Fremantle line and includes a bridge over Tydeman Road.

How will cycling and pedestrian facilities be improved at the East Street/Canning Highway intersection?

Pedestrian crossing facilities at the intersection will be improved with more direct and shorter crossings. A wider and improved refuge (median

island) will provide safe passage for pedestrians crossing Canning Highway.

Did you consider a pedestrian overpass or underpass on Canning Highway?

Yes. Grade separation was explored but was found to be not feasible. Canning Highway will be single lane in each direction, separated by a generous median, significantly improving safety in this area.

Will you separate cyclists e-scooters and pedestrians on shared paths?

E-scooters are permitted on shared paths and bicycle paths and cannot travel no more than 25km/h. Users will be required to give way to pedestrians and keep to the left. More information regarding eRideables can be found at <https://www.wa.gov.au/organisation/road-safety-commission/erideables>

Construction

When will construction begin?

Early investigations and geotechnical works are now complete. Additional early works will take place to prepare the area prior to construction starting late 2022.

Will I hear noise and feel vibrations during construction?

Some work, such as piling, is likely to be noisy and may result in vibrations. As part of the process of construction management, we will provide advanced notification of this type of work so residents and businesses can be aware of the work program.

An environmental management plan will be in place during construction, which will include requirements to monitor and manage noise and vibration impacts.

Will construction impact my travel times?

There will be some impacts to the traffic network, and, at times, this will include single lane closures on the Fremantle Traffic Bridge as well as detours for pedestrians and cyclists.

The project team will work with the Public Transport Authority to minimise impacts to rail passengers and provide advanced notification ahead of any closures.

All traffic management will be subject to approvals and we will provide residents and businesses advanced notice of anticipated delays.

We encourage local residents to sign up for project updates [here](#).

Traffic Impacts

Will there be traffic and rail disruptions?

Yes, there will be some disruptions throughout the project, and we will keep the community up to date – that includes train and bus passengers, drivers, pedestrians, and cyclists as well as river users and ferry operators.

Will traffic on Canning Highway increase as a result of the closure of Beach Street?

Some increase in traffic may be expected. However, removing the traffic lights from Queen Victoria Street and Canning Highway intersection will improve traffic flows, meaning journey times are unlikely to be any longer

How do the changes at the Canning Highway/East Street intersection affect traffic movement and performance?

There are no changes to the existing permitted movements at the intersection. The intersection will be modified to improve safety for both vehicles and pedestrians. It is anticipated that there will be some increase in traffic using East Street, but this should not impact travel times.

Will East Street south of Canning Highway be impacted?

Yes. We expect a slight increase in local traffic using East Street with the closure of Tuckfield Street.

What are the anticipated traffic impacts from the closure of Beach Street?

Beach Street will become a cul-de-sac near the Beach Street jetty. Generally Riverside Road traffic can travel via East Street and turn right onto Canning Highway, in addition to a number of alternative routes that are available to continue their journey into Fremantle, with minimal impact to travel times.

Are any changes planned for the current East Street / Canning Highway intersection?

Yes. Canning Highway will transition from four lanes to two lanes westbound at East Street. All traffic movements are maintained. Pedestrian crossing facilities will be improved.

Environment

Will the demolition and construction impact the local environment and the Swan River?

Main Roads is working through a range of processes and undertaking planning to ensure

environmental impacts during the demolition and construction are minimised.

Has climate change and potential sea level rise been considered?

Yes. Main Roads has a climate change and adaptation guideline that all projects and works near coastal areas consider in the planning, design and construction phases.

In line with this, the project has designed for a 300mm sea level rise for roads, and a 900mm sea level rise for bridges. The reason bridges need 900mm is to control changes in navigation clearance requirements as the sea rises.

How are we managing the dolphins during construction?

A trained Marine Mammal Observer (MMO) will be present during pile driving activities which will be stopped immediately if a marine animal is sighted within or close to the shut-down zone.

How can I have my say?

The Fremantle Bridges Alliance will be engaging local residents, businesses and community groups through a range of communication channels, including face-to-face meetings, newsletters, a frequently updated website and social media updates.

Will my feedback be considered in the design process?

All the ideas and feedback received have been shared directly with our design teams and have influenced the functions and aesthetic outcomes for the project.

The team consists of architects, engineers, and Fremantle-based placemaking and urban landscape specialists who have been busy incorporating the feedback into the design of the project.