PROJECT UPDATE
JULY 2024

Australian Government
BUILDING AUSTRALIA

mainroads WESTERN AUSTRALIA

Swan River Crossings - Fremantle Traffic Bridge

Telecommunications drill rig on Beach Street

Services relocation to pave the way for construction works

For decades, the old Fremantle Traffic Bridge has been home to several telecommunication and water service lines that require relocation to allow construction of the new bridge to begin.

Telecommunications

Relocation of the telecommunication service line was completed last month. Seven new Telstra pipes were installed under the river, with the help of a horizontal directional drill rig. Telstra contractors are currently connecting the new service line to the existing network. Once complete, the old service lines on the bridge will be disconnected.

Picture 1: Telecommunications drill exit point

Steering a horizontal directional drill rig is complex and requires highly skilled operators. To steer a drill rig:

- Signal controllers are positioned on the northern and southern sides of the river.
- A line wire is continuously fed through the drill pipe to the drill tip and transmits a signal to the surface.

- The signal controllers then broadcast the signal from the drill tip and transmit its location to the steering crew.
- The steering crew can then adjust the angle of the drill tip to avoid any obstacles and stay on course.

A marker on the northern embankment showed where the drill needed to resurface. The photo (above) shows the drill tip hit the marker right on target!

Water

Preparation is underway to relocate water services. There is a hive of activity on both sides of the river, preparing for the arrival of a new, larger drill rig.

Relocating water is complex. The pipes are:

- Six times the size of the telecommunications pipe.
- Approximately 400 metres long when segments are welded together.
- Once filled with water, will weigh over 200 tonnes.
- Pressure tested to ensure there are no leaks prior to installation.

Picture 2: 630mm water pipe section (left) and 110mm telecommunications pipe section (right)

The car park on Podger Lane (near the Swan Hotel) and the shared path adjacent to the rail line are closed to provide space to string, weld and pressure test two water pipes.

Upcoming works

Construction of site offices, ramps and temporary jetties

Our site office and associated facilities will be set up in North Fremantle near the Podger Lane car park. Site preparation works will be followed by construction of the ramps and temporary jetties, which will be done at the same time as water service relocation works, and once relevant approvals have been received. These works include:

Picture 3: All four temporary jetties

- Vegetation removal on the north-east and north-west sides of the bridge.
- Excavation and foundation preparation works to build ramps for the temporary jetties (including drainage and pavement construction).
- Piling (on land and in river) to build the temporary jetties which will support the cranes used to construct the new bridge.
- Abutment concrete construction, including piling and earthworks.

Temporary jetties will be used throughout construction and removed at project completion.

Sharing the importance of Aboriginal heritage with the next generation

Since 2020, a Whadjuk Elders Advisory Group has provided valuable insight, which has informed the design of the project. Common themes heard over this time included:

- Reducing the number of pylons in the river to create an uninterrupted flow of the river water at the location of the crossings, along with the importance of traditional song lines;
- Ensuring a clear understanding of local history and cultural significance.

Picture 4: Left, Rory (Alliance Environmental Manager) with Freda Ogilvie

Last month, the project hosted a BBQ with Whadjuk Elder, Freda Ogilvie and a group of Aboriginal students from the Maali Mia Program at John Curtin College of the Arts.

The students will be working with Freda in coming months to design a project logo.

Further information

For enquiries, please phone 138 138, email enquiries@mainroads.wa.gov.au or click here to learn more about the project.