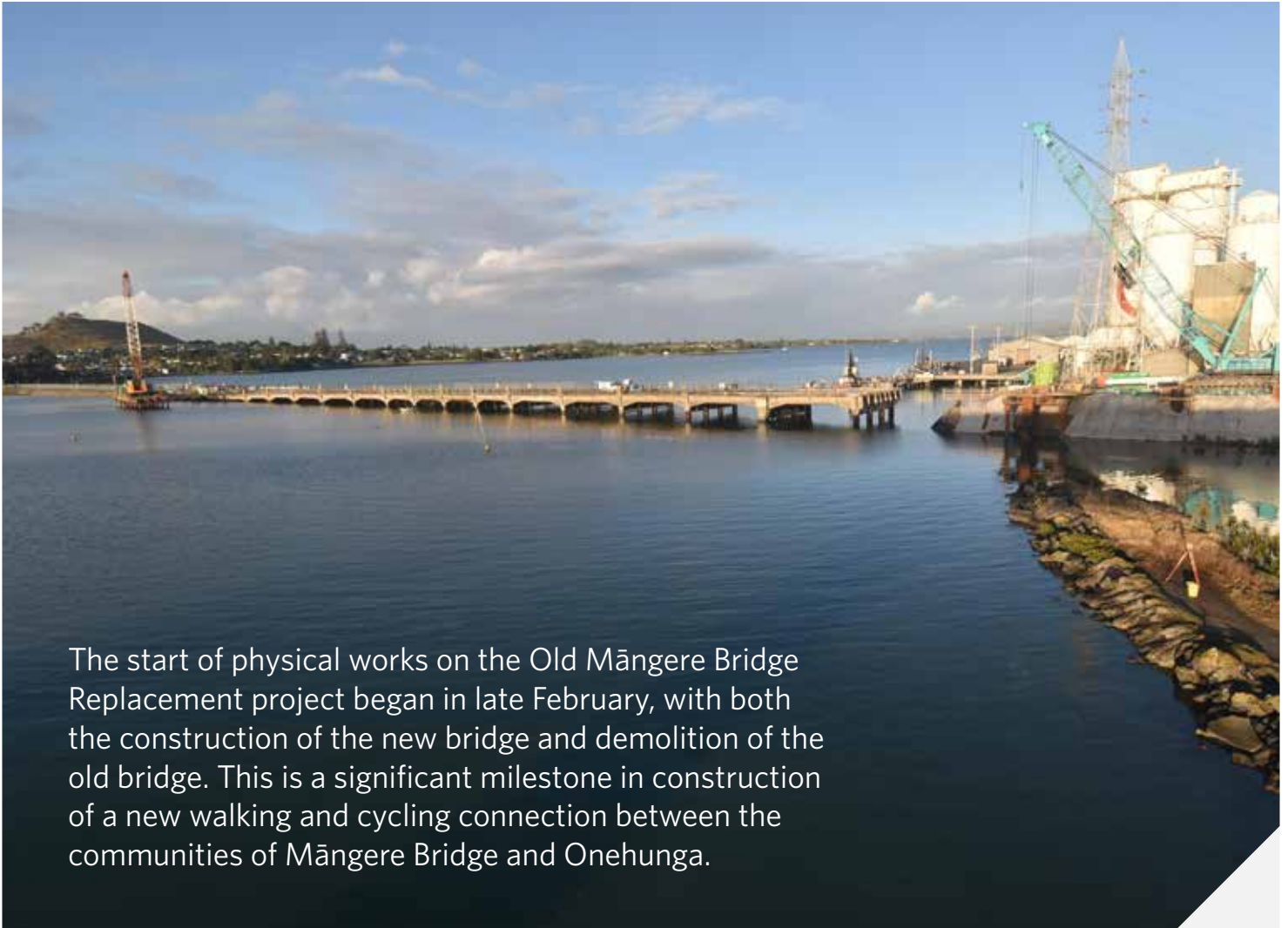


OLD MĀNGERE BRIDGE REPLACEMENT PROJECT



The start of physical works on the Old Māngere Bridge Replacement project began in late February, with both the construction of the new bridge and demolition of the old bridge. This is a significant milestone in construction of a new walking and cycling connection between the communities of Māngere Bridge and Onehunga.

Construction of the replacement bridge

If you are walking past the construction site, you are likely to notice the three large cranes which are the biggest pieces of machinery in the project area. The team will be using the two 250-tonne cranes and the 110-tonne crane for the first stage of work.

The cranes are positioned on both sides of the harbour as the demolition of the old bridge and the construction of the replacement bridge will take place at the same time and from both sides.

On either side of the harbour, you can also see the first sections of the temporary work platforms we are building alongside where the new bridge will be built. Four of the 29 permanent piles that are needed to support the replacement bridge in the harbour have been completed on the northern side.



The 120 tonne crane onsite

How will the Old Māngere Bridge be demolished?

The demolition of the old bridge will be carried out in three stages.

The first stage is to lift out the northern span using a 250-tonne crane. Each span is made up of eight beams and will be removed beam by beam, which is almost the reverse of how the bridge was constructed 100 years ago.

The second stage is to deconstruct the centre spans of the bridge, which will then be demolished from beneath using a 20-tonne excavator with crusher jaws mounted on a barge in the Manukau Harbour.

The barge will be positioned under the old bridge and large skip bins with debris screens will catch the demolition material to ensure none falls into the harbour. The barge will moor at the northern abutment to unload and the waste material will be taken to a recycling centre for disposal.

The team will work south until they reach the final stage when the last southern span will be 'cut and craned' out in the same way the span at the northern end was removed.

The demolition of the old bridge is expected to take approximately six months.



Old Māngere Bridge after the first span was removed, as seen from Onehunga



The team use a concrete cutter to remove a plinth from the Old Māngere Bridge

Keeping pieces of the Old Māngere Bridge

Work is being undertaken to keep some of the elements of the old bridge so that these can be used in the surrounding landscape for the community.

The pieces being kept include some of the plinths, handrails and several of the old bridge's beams. These will be removed, stored for the duration of the project and

then used in the landscaping planned around the entry and exit points of the new bridge.

These heritage elements will provide a link to the past, to ensure the memory of the Old Māngere Bridge remains for future generations of community as well as visitors to the area.

There is about

1400 tonnes of steel currently onsite
which is as heavy as . . .

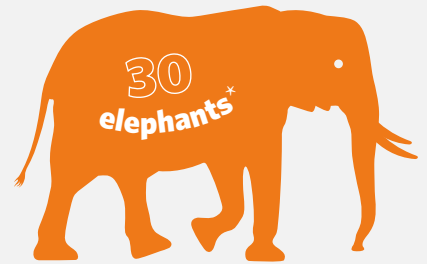


*an average Blue Whale weighs 140 tonnes

To build the temporary work platforms we will use more than 1000 tonnes of steel...

Approx.

150 tonnes of head stocks/bracing
which is as heavy as . . .



*an average African elephant weighs five tonnes

Approx.

554 tonnes of steel
for piles/vertical supports
as heavy as . . .



*a jumbo jet (Boeing 757) weighs on average 100 tonnes

Approx.

370 tonnes of staging beams / horizontal supports
which is as heavy as . . .



*an average car weighs 2.5 tonnes.

WAKA AMA ON THE WATER

The Manukau Harbour is the second largest natural harbour by area in New Zealand and is a playground for many local groups including the Portage Waka Ama club.

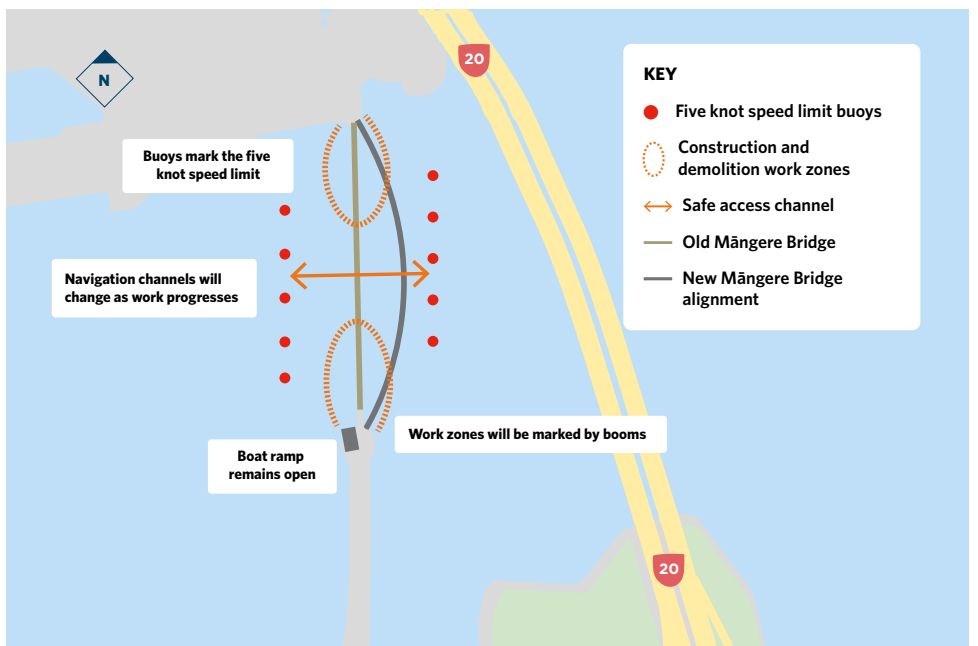
We're working closely with Waka Ama to ensure their members stay safe during demolition and construction so they can continue to train and compete on the water.

Club secretary Kathy says "Safety is an important part of our sport, we respect the harbour and all the other activities going on in it".

"We know the buoys mark areas that are restricted for everyone's safety. We don't want any of our crews getting near the demolition or construction work".

The buoys will remain in the water but move slightly over the course of the next six months to reflect the changing work locations and signify both restricted areas and where a five-knot speed limit is in place. It's important to check the signage at the boat ramp before you enter the water to make sure you know where the safety zones are.

If you do need to cross under the Old Māngere Bridge, please check the signage and only use the spans it is safe to travel under.



Project Team attend the Onehunga Festival

At the end of February, the project team attended the Onehunga Festival which was a great opportunity to meet local community and visitors.

Information boards helped people to learn more about the design of the replacement bridge as well as the programme for the demolition of the old bridge and construction of the replacement bridge.

A lot of the people we spoke to were excited to see work underway and we received some positive feedback. It was a great opportunity for us to speak with people who will be using the replacement bridge and show how earlier feedback received during previous community engagement has been incorporated into the final design.

MEET THE PROJECT TEAM



Ronnie Salunga,
Waka Kotahi Project Manager

What is your role and responsibility in this project?

I'm the Waka Kotahi NZ Transport Agency Project Manager responsible for ensuring that this project is completed safely and on time. I liaise with both our internal and construction teams to help plan, organise and support everyone in achieving this goal.

What do you enjoy about working on this project?

I've been involved in the development of this project since 2014 and it's rewarding to now be at the point of building the replacement

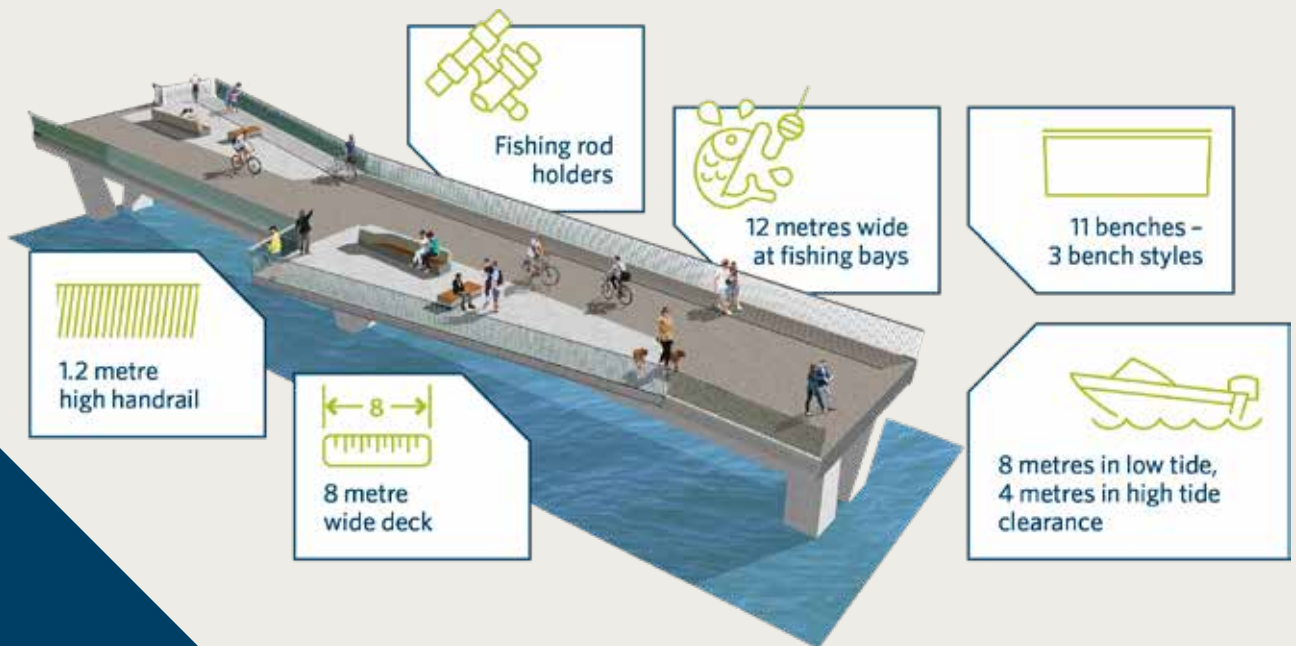
bridge. The replacement bridge will be an important walking and cycling connection between the communities of Māngere Bridge and Onehunga as well as a place for visitors to come and enjoy the views across the Manukau Harbour.

What is the outcome you'd like to see at the end of construction?

I look forward to seeing the input we have received from partners, stakeholders and community come to life through the construction of the bridge. It includes features such as wide fishing bays, seats along the bridge and some beautiful artwork designed by our mana whenua partners. I know that the community will love the bridge when it opens and that it will become a place where people can visit and spend the day. I know how much the Old Māngere Bridge was cherished and I hope that this bridge is enjoyed by future generations too.

KEY FEATURES OF THE REPLACEMENT BRIDGE

The design of the replacement bridge acknowledges the many users of this public space who will travel across the Manukau Harbour as well as those who may visit the bridge as a destination in itself and sit to enjoy the views of the surrounding area.



For more information on the project or to sign up to newsletter updates, please scan the QR code or visit www.nzta.govt.nz/omb

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