

WEBB STREET, NARRE WARREN

# HOW WE'LL BUILD THE RAIL BRIDGE



*Southeast view of the new Narre Warren Station and landscaped forecourt.  
Artist impression, subject to change.*

As part of the Victorian Government's commitment to removing 110 dangerous and congested level crossings by 2030, we're removing the level crossing at Webb Street, Narre Warren.

This project is part of an investment to upgrade the Pakenham Line, which will be boom gate free by 2025.

We'll remove the level crossing by building a new elevated rail bridge over Webb Street. We'll also build a new Narre Warren Station, with improved and modern facilities for the community to enjoy.

The bridge will be about one kilometre long and sit on reinforced columns which will support the long concrete bridge sections.

We will also build a new 50m steel structure over Narre Warren-Cranbourne Road beside the existing bridge. The new steel structure will connect the rail bridge to the existing track in the east.

The existing bridge will remain in place to provide important maintenance access to the rail track.

Major construction at Webb Street began in December 2022, with the level crossing gone and new Narre Warren Station open by 2025.



*The new elevated platforms at Narre Warren Station.  
Artist impression, subject to change.*

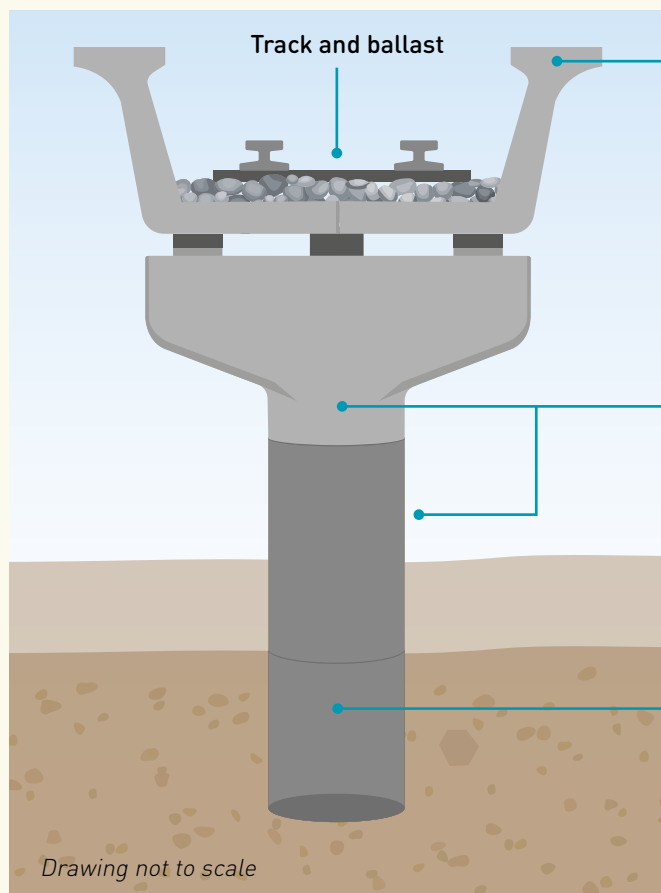
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# WHAT MAKES UP THE RAIL BRIDGE?



We'll build the new rail bridge using concrete columns and beams, a steel bridge section and retaining walls at each end.



## U-troughs

The bridge sections, called U-troughs, are made up of two long L-shaped concrete beams.

At Webb Street, approximately **32 U-troughs** will be connected to form the new rail bridge. Crushed rock ballast and track will then be laid along the bridge to prepare it for trains



## Columns and headstocks

Bridge columns are upright concrete supports that hold the rail bridge up. The rail bridge over Webb Street will have **32 bridge columns**.

Headstocks sit on top of the columns and support the bridge sections.



## Piles

Piles are deep underground foundations. Piling rigs will drill more than **110 holes** that are reinforced with steel and filled with concrete to support the rail bridge and new station.

The piles are up to **1.5 metres** in diameter and **25 metres** deep in some places.



## Super T-beams

**Twelve concrete Super T beams** will support the station platforms at the new Narre Warren Station. The beams are up to 27 metres long and are lifted into place using large cranes.



## Retaining walls

Retaining walls hold compacted soil in place to support the rail line as it moves back to ground level at each end of the bridge.

We are using **approx 130 metres** of reinforced-earth wall to support the rail line west of Webb Street as it moves back to ground level.

The steel bridge section over Narre Warren-Cranbourne Road will connect close to ground level in the east, meaning smaller retaining walls can be used to support the rail line as it meets the existing track.



## Steel bridge

A **50-metre steel bridge section** will sit over Narre Warren-Cranbourne Road, connecting the rail bridge to ground level on the eastern side of the road.



Example of steel bridge at High Street, Reservoir.

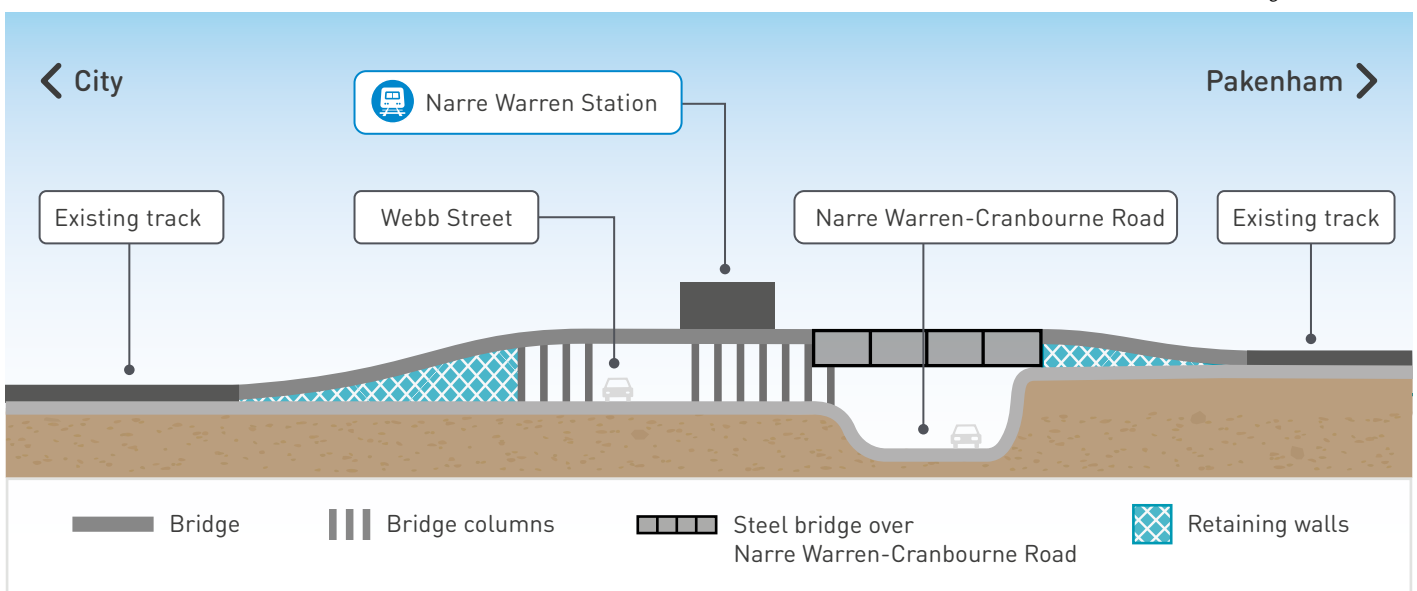
## Building the bridge

Building the elevated rail bridge starts with deep concrete foundations called piles.

- 1 Piling rigs drill holes up to 25 metres deep.
- 2 A steel reinforcement cage is inserted into each hole.
- 3 Each hole is filled with concrete, creating a deep foundation called a pile.
- 4 Columns and headstocks are installed on top of the piles.
- 5 Long L-shaped beams are lifted on top of the headstocks. Each pair of L-beams is joined together with concrete to form a U-trough.
- 6 A 50-metre steel bridge section will sit over Narre Warren-Cranbourne Road, connecting the bridge to the east.
- 7 Retaining walls are built to support the bridge as it moves back to ground level.
- 8 Crushed rock ballast and train tracks are laid and connected to the existing track.

## How the pieces fit together

Drawing not to scale



# Sourcing locally

Where possible, we'll source as many components of the new rail bridge locally.

The L-beams, columns and headstocks that make up the rail bridge are manufactured in Victoria, and the new 50-metre bridge section over Narre Warren-Cranbourne Road is made from Australian steel.



## Get in touch

If you have any questions about upcoming project works, call us on **1800 105 105** or email [contact@levelcrossings.vic.gov.au](mailto:contact@levelcrossings.vic.gov.au)



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Scan the QR code or text **WEBB** to **0427 840 967** to receive real-time notifications about works that may impact you.



*Station concourse. Artist impression, subject to change.*

## Project timeline

- ✓ **2021–early 2022**
  - Early investigations
- ✓ **January 2022**
  - Design solution confirmed
  - Site investigations continue
- ✓ **March 2022**
  - Concept designs released and community engagement
- ✓ **August–September 2022**
  - Final designs released
  - Early works start
- **Late 2022**
  - Major construction starts
- **2025**
  - Level crossing removed

*\*The timeline above is subject to change.*



## CONTACT US

[contact@levelcrossings.vic.gov.au](mailto:contact@levelcrossings.vic.gov.au)

1800 105 105

Level Crossing Removal Project  
GPO Box 2392, Melbourne VIC 3001

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