

Piling fact sheet



Dublin Road, Ringwood East

We're getting on with the job of removing the level crossings at Dublin Road, Ringwood East and Bedford Road, Ringwood and building a new Ringwood East Station.

These dangerous and congested level crossings will be removed by building rail trenches under the roads. In 2025, the boom gates will be gone for good and the Lilydale line will be level crossing free.

To build the rail trench and the road bridge, we'll first need to install some concrete columns, called 'piles', under the ground.

This is referred to as piling and the machine that installs the piles is known as a piling rig. A series of piles will be installed along the rail alignment to form the vertical walls of the trench and some of the piles will support bridge and station structures.

Ahead of piling commencing in each area, you'll notice an increase in worker activity, material deliveries and the construction of hardstands in preparation for piling rigs to operate at that location.

Hardstands, or piling rig pads, are usually in the form of compacted crushed rock, and are built to provide ground stability for the piling rigs. They are constructed to safely withstand the load of heavy vehicles and machinery. When these are constructed, the piling rig will be transported by trucks and assembled onsite.



Piling works on site on the Union Road and Mont Albert Road Level Crossing Removal Project.

Types of piling we're using

There are various piling methods used depending on the construction methodology, site conditions and engineering advice for the project. In Ringwood and Ringwood East, we're mainly using **bored piling**.

This type of piling has less community impact in terms of noise and vibration. At times, however, nearby community members may notice some increase in noise levels.

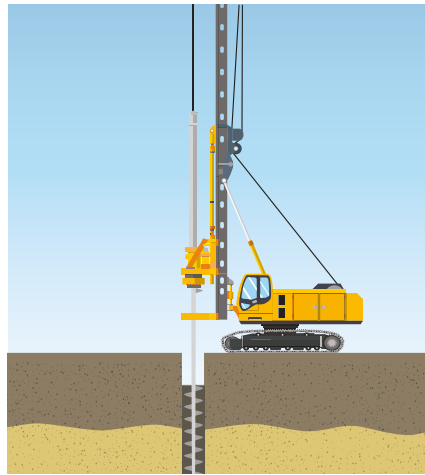
A pile is formed when a piling rig drills circular holes into the ground using an auger attachment (a corkscrew-shaped drill). Once the bore has reached the desired depth, a reinforcement steel cage is lowered into the hole before being backfilled by concrete.

In Ringwood East, we'll install around 575 bored piles along a 700 metre section of rail corridor between Federal Road/Army Barracks and Bona Street/Lois Street. These piles will be drilled to depths of 18.5 metres with diameters up to 1.2 metres.

Although the piles won't be visible until excavation of the trench takes place, they play an important role in ensuring the walls surrounding the rail infrastructure are solid and secure.

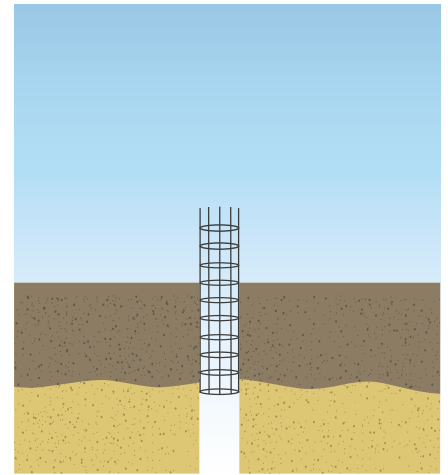
Piling will commence from July 2023 and we'll provide the local community with more information about timing and the impacts of piling as works progress.

How we install piles



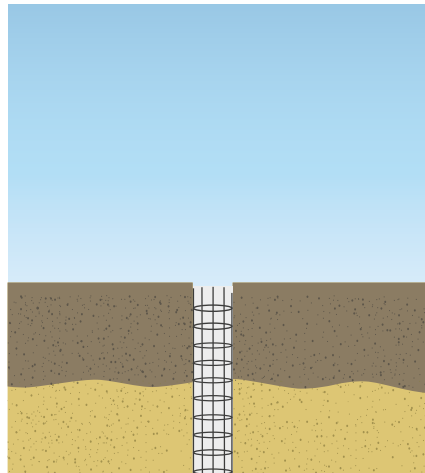
1. Drill the hole

Using a drilling tool called an auger, we drill circular holes as deep as 18.5 metres into the ground to create a bore (hole).



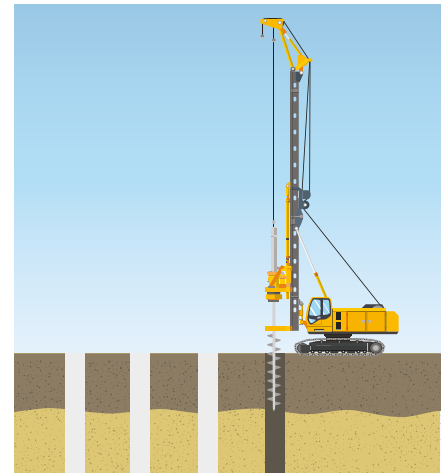
2. Steel reinforcement

Once the bore has reached its desired depth, a full-length cylindrical steel cage is lowered into the bore to secure and reinforce the pile.



3. Concrete fill

Concrete is then poured into the hole to set the pile structure.



4. Repeat

This process continues along the rail alignment to build the trench walls.

What will we do to manage community impacts?

We will:

- directly notify neighbouring households in advance of disruptive works through letterbox drops and doorknocks
- monitor noise and vibration levels to ensure we comply with Environment Protection Authority (EPA) guidelines
- maintain a safe distance between homes and machinery.






If you have any questions about piling, you can contact the project team by calling **1800 105 105** or sending an email to contact@levelcrossings.vic.gov.au.

levelcrossings.vic.gov.au

contact@levelcrossings.vic.gov.au



For languages other than English, please call 9209 0147.

1800 105 105 (call anytime)     

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