

Fact sheet

Micro tunnelling



The \$2.4 billion Parramatta Light Rail will connect Westmead to Carlingford via the Parramatta CBD and Camellia, and is expected to open in 2023. Micro tunnelling is a discreet construction approach that will be used to create drainage underneath Parramatta's Church Street in the CBD.

Why is the Parramatta Light Rail using micro tunnelling in the CBD?

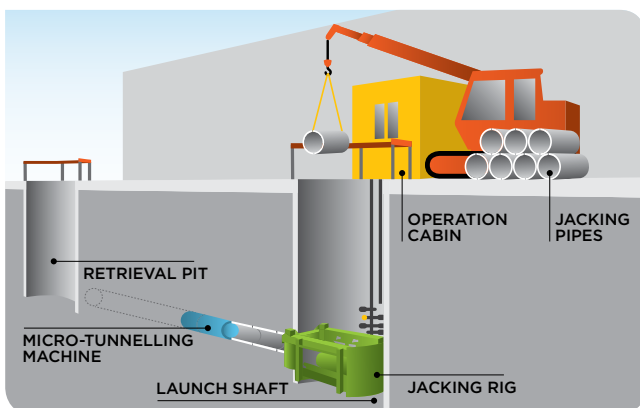
Transport for NSW acknowledges that, as with any major infrastructure project, the construction of the Parramatta Light Rail will involve some disruption.

Micro tunnelling is being used to build drainage and stormwater capacity underneath Parramatta's Church Street, including 'Eat Street'. The use of micro-tunnelling machines will help minimise construction impacts in comparison to traditional pipeline construction at street level.

These will reduce the chances of impacting other pipes, electrical wires and utilities, and minimise noise, dust and vibration on Church Street. While micro-tunnelling work is underway, businesses and the community can continue to access public spaces such as Centenary Square.

What is micro tunnelling?

Micro tunnelling is an innovative method of construction used to create a tunnel under the ground. The machine is remotely operated and similar to a tunnel-boring machine but smaller in diameter (approx. 1.5 metres).



How will micro tunnelling work for the Parramatta Light Rail?

One micro-tunnelling machine will dig six metres underneath Church Street, from Centenary Square to Lennox Bridge. Launched from a pit in Centenary Square, pipes of concrete will be pushed behind the machine to cut the tunnel. The machine will continue to a retrieval pit at Lennox Bridge.

A second, smaller micro-tunnel machine will drill across Centenary Square to a second pit outside Parramatta Town Hall, connecting to an existing pipe to extend stormwater capacity.

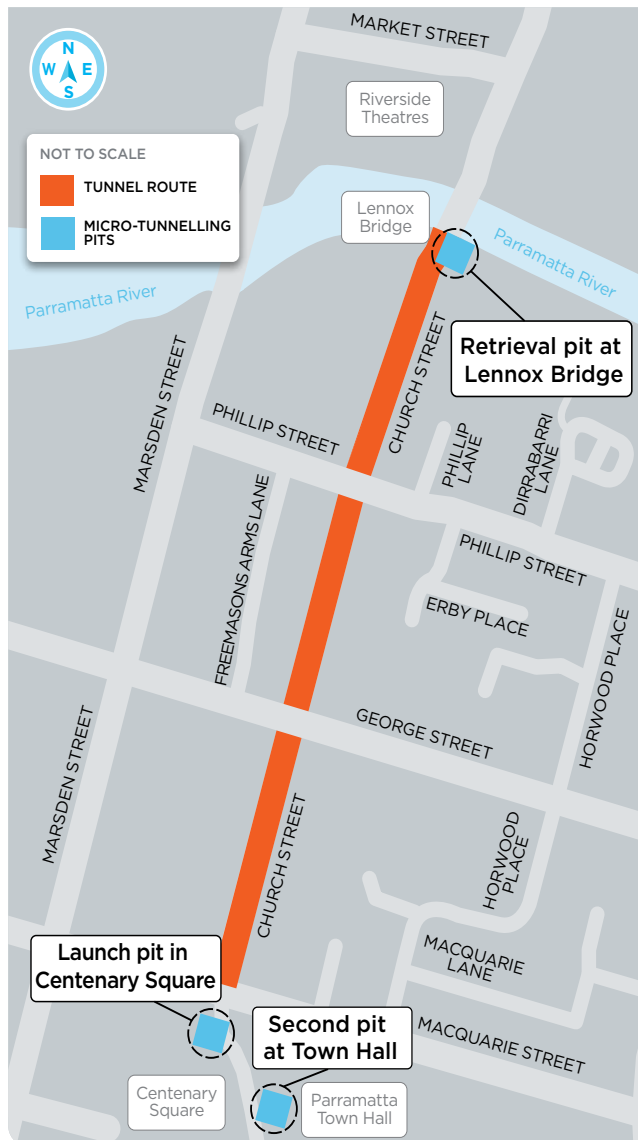
In total, nearly 600 metres of micro tunnelling will be undertaken on the Parramatta Light Rail project.



A micro-tunnelling machine lowered into the pit

What are the benefits of micro tunnelling?

- Minimises the impact of construction through built-up environments like Parramatta's Church Street.
- Reduces road and footpath excavations, as it is limited to a launch and retrieval pit.
- Smaller construction sites compared to trenching Church Street at street level then laying down a new pipe.
- Quicker and safer compared to traditional excavation methods.
- Work can be undertaken 24 hours a day with minimal impact on the community.



Parramatta Light Rail features and benefits

- High-frequency 'turn-up-and-go' light rail services seven days a week, approximately every 7.5 minutes during peak periods.
- 16 fully accessible stops, integrated into the urban environment.
- Modern and comfortable air-conditioned vehicles, 45 metres long and driver-operated, carrying up to 300 customers.
- Will integrate with existing rail, bus, ferries, and future Metro at Westmead and the Parramatta CBD.
- Expected to take the equivalent of 25,000 cars off the road by 2041.
- Light rail is expected to commence services in 2023.



Keeping you informed

Transport for NSW is committed to providing regular and frequent information to the community about the Parramatta Light Rail program. Project updates, maps and construction notifications are available at our website: parramattalightrail.nsw.gov.au. You can also call our 24-hour project hotline on 1800 139 389.