



Mike Baird MP
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Minister for Infrastructure
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MEDIA RELEASE

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**TUNNELLING STARTS ON \$8.3 BILLION NORTH WEST RAIL
LINK FOUR MONTHS AHEAD OF SCHEDULE**

NSW Premier Mike Baird and Minister for Transport Gladys Berejiklian today kicked off the start of tunnelling on the \$8.3 billion North West Rail Link – Australia’s biggest public transport project.

“The NSW Liberals & Nationals came to government promising the first of the four massive North West Rail Link tunnel boring machines would be in the ground before the end of 2014 and we’ve delivered - four months early,” Mr Baird said

“This is a huge milestone in the delivery of this project – it shows we are getting on with meeting our commitments and delivering the vital infrastructure this state desperately needs.”

Mr Baird and Ms Berejiklian were today joined by North Western Sydney MPs at the Bella Vista tunnelling site to officially mark the start of tunnelling and to send off Elizabeth, the first tunnel boring machine.

“For more than a decade this project was promised, cancelled and then re-promised by NSW Labor.

“Today, I’m delighted to stand here as the first massive tunnel boring machine begins its historic journey digging Australia’s longest railway tunnels.”

Ms Berejiklian said Elizabeth has been assembled at the Bella Vista tunnelling site over the past seven weeks and is 120m long – almost the length of two A380 super-jumbo jets end-to-end.

“The four mega tunnelling machines are supporting 900 new jobs as part of the \$1.15 billion tunnelling contract which was awarded in June last year,” she said.

“The feedback I am always hearing is that the people of the North West just want this project built, and construction is now well underway.

“The North West Rail Link has been a top priority for this Government and I am pleased to announce today that the next two tunnel boring machines are also expected to be in the ground before the end of this year, ahead of schedule.

“The North West Rail Link is due to open in 2019 and is the first stage of Sydney Rapid Transit, the city’s new fully automated rail network.

“The NSW Government has made it clear that if we receive a mandate next March, the Rapid Transit network will be extended through the CBD and west to Bankstown, giving public transport customers right across Sydney access to fast, reliable and modern turn-up-and-go services.

“Sydney Rapid Transit will reduce crowding right across the network - unblocking major bottlenecks in the city and allowing up to 60 per cent more trains every hour across the train network.

“I congratulate Project Director Rodd Staples and the tunnel builders, Thiess John Holland Dragados, on reaching this tunnelling milestone so quickly and look forward to seeing the next three TBMs join Elizabeth in building this critical infrastructure project.”

FACT SHEET – TUNNEL BORING MACHINES

Four tunnel boring machines (TBMs) will dig the North West Rail Link's 15km twin tunnels from Bella Vista to Epping – Australia's longest railway tunnels.

TBM1 Elizabeth and TBM2 will dig 9km from Bella Vista to Cherrybrook.

TBM3 and TBM4 will dig 6km from Cherrybrook to Epping.

Completion of the tunnelling contract is expected in 2017.

TBMs are manufactured in France and China before being shipped to Australia.

The TBMs have been designed and built specifically for Sydney's geology and will dig mostly through Sydney Sandstone and shale.

The TBMs will dig around 120m a week, on average.

They operate underground 24 hours a day, seven days a week and are staffed by a rotating crew of 15.

TBM1 Elizabeth has been re-assembled over the past six weeks at Bella Vista by 71 workers who put together thousands of small components from 18 shipping containers as well as 22 large pieces.

It took two 500 tonne cranes about seven hours to secure and lift the 105 tonne circular cutter-head into place.

The cutter-head is made up of 40 tungsten steel cutters, which will split the rock as Elizabeth moves forward.

Each cutter weighs 250kg and will be replaced about every three weeks.

To get down to tunnelling depth at Bella Vista, about 120,000 tonnes of rock was removed from the Bella Vista station "box", and most of it re-used on the wider construction site.

Elizabeth is connected to tunnelling support services above ground including power, ventilation, compressed air, grout plant, hydraulic cooling towers, water pumps, a water treatment plant and spoil conveyors.

After a school naming competition with the theme 'Women who have made a positive contribution to life in Sydney', TBM1 was named after colonial pioneer Elizabeth Rouse – after whose family the suburb of Rouse Hill is also named.

On major tunnelling projects around the world, underground workers look to Saint Barbara for protection and, because of that, machines that work underground are traditionally given female names.