



Piling and controlled blasting between Shephards Lane and Mackays Road

Coffs Harbour bypass

April 2024



Transport for NSW acknowledges the Gumbaynggirr people as the Traditional Custodians of the lands on which we work and pays respect to Elders past and present.

The Australian and NSW Governments are funding the \$2.2 billion, 14-kilometre Coffs Harbour bypass project. The bypass will boost the regional economy and improve connectivity, road transport efficiency and safety for all motorists.

As part of major construction, the Coffs Harbour bypass project is building two bridges and controlled blasting four cuts between Shephards Lane and Mackays Road, Coffs Harbour.

What work are we doing?

Bridge construction starts with bored piling. The two bridges – the Shephards Lane overpass and the bridge over the North Coast Railway line – will have eight and 52 piles, respectively. A pile generally takes eight hours to complete. This work will involve:

- Building pads to create stable footings for piling rigs to sit on
- Transporting piling rigs to site via the project's approved heavy vehicle routes
- Drilling through soil and rock in the ground with piling rigs to form the pile holes
- Installing steel reinforcement cages into the holes
- Delivering concrete from the project's batch plant on Englands Road, North Boambee
- Pouring concrete into the pile holes to build piles
- Using pneumatic drills (jackhammers) to remove concrete overpour
- Stockpiling soil and rock and transporting it for use on other areas of the bypass.

The next steps for bridges includes building the substructure before adding the deck.

Controlled blasting is used to break hard rock that can't be excavated by mechanically. We use this rock to build up "fill" parts of the alignment that run through lower areas and to process into pavement materials. This work will involve:

- Drilling blast holes over multiple days
- Placing explosives in the holes according to a set pattern and depth
- Traffic control and short stoppages on local roads, if required
- Detonating the blast
- Monitoring vibration and air blast overpressure (noise from energy release)
- Crushing the rock and loading it into trucks
- Transporting the rock for use on the alignment.

Approved construction hours are **7am to 6pm, Monday to Friday and 8am to 1pm, Saturday.**

Controlled blasting for cuts will be carried out between 9am and 5pm, Monday to Friday and 9am to 1pm on Saturdays.

The safety of workers and the community is our highest priority when undertaking controlled blasting activities. All blasts are managed by a licensed contractor and experienced shotfirer in line with relevant legislation. An exclusion zone will be established before each controlled blast and all site access points will be manned by designated blast guards to stop access.

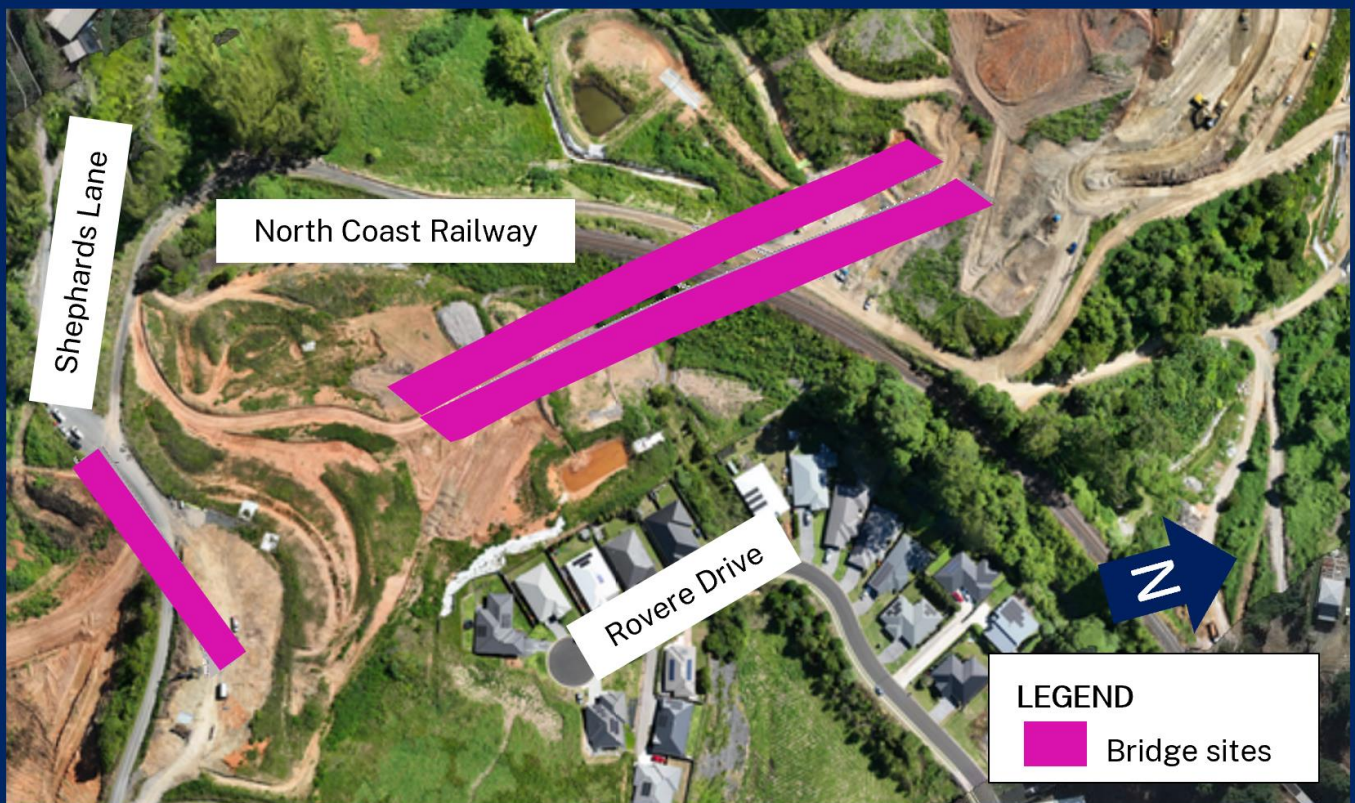


Locations

Controlled blasting between Shephards Lane and Mackays Road



Bridge sites near Shephards Lane



When and where we'll be working

Bridge piling and controlled blasting between Shephards Lane and Mackays Road will be completed from **mid-April 2024 to December 2024**, weather permitting.

What will this mean for you?

The equipment and machinery we use for this work include a drill rig, piling rig, crane, pneumatic drill (jackhammer), concrete trucks and heavy vehicles to transport soil and rock.

Moderate, consistent noise will be heard from the piling rig when it is drilling. Louder clangs occur towards the

end of the digging to remove material from the drill piece. To remove excess concrete, we use a pneumatic drill (jackhammer) which is noisy.

Concrete deliveries will be made via Shephards Lane and Mackays Road, with traffic control in place to assist with these movements. Motorists can expect reduced speed limits and delays of up to five minutes.

The Minister's Conditions of Approval (MCoA) for the project sets strict limits on vibration and air blast overpressure and all blasts are modelled and monitored to ensure compliance. Any increase to these limits will be discussed and agreed with all residents before work

starting. Data from the monitoring will be publicly available on our website each month.

We intentionally stage our controlled blasts to minimise impacts for community. There will be up to two blasts per week with up to 20 blasts in each location. Traffic control will be in place on roads located within the exclusion zone for each cut site where we are doing blasting. For your safety, please follow signage and the direction of traffic control.

Managing our impacts

We are using bored piles instead of driven piles which means we will drill holes for the piles rather than hammering them into the ground. This approach helps us break through hard rock in the Coffs Harbour area and is not as disruptive for nearby residents and

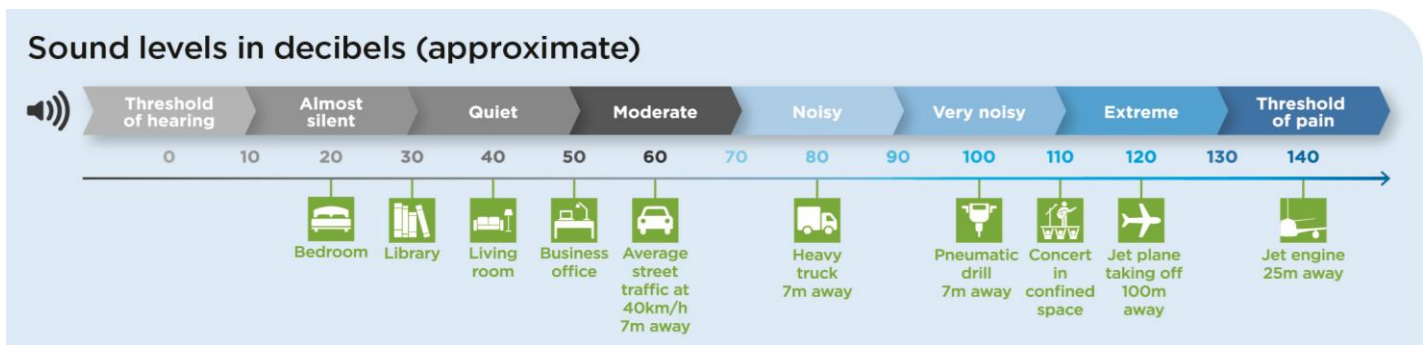
businesses because it creates less noise and vibration. Noise from a controlled blast is over quite quickly and can be compared to a loud clap of thunder. The project team will liaise with affected residents and property owners in advance of blasting, including weekly updates via email and SMS, if requested.

Drilling and crushing activities are constant and can be considered very noisy, as illustrated in our graphic.

The project's Environment Protection Licence (EPL) sets strict limits for construction noise, and we undertake regular noise monitoring to ensure compliance.

We will position plant and equipment as far from nearby neighbours as possible during piling, drilling, and crushing work and will schedule respite periods, as required.

Comparison in noise levels



Current and upcoming work

Other construction work in this area includes:

- Out of hours delivery of concrete from the batch plant at Englands Road, North Boambee to along the alignment and concrete pouring to meet construction requirements
- Out of hours refuelling and plant and machinery maintenance along the alignment

- Bulk earthwork and drainage along the alignment – this may include extended hours on Saturdays
- Controlled blasting at various locations along the alignment
- Out of hours refuelling and plant and machinery maintenance
- Out of hours internal haulage route and environmental controls maintenance.

Contact us



Project information and 24-hour construction response line **1800 550 621**



View our **community information van** timetable



community@CHBteam.com.au



For the latest traffic updates:

Call 132 701, visit livetraffic.com or download the app Live Traffic NSW



pacifichighway.nsw.gov.au/
coffsharbourbypass



Interpreter service

For languages other than English call 131 450



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