



June 2018

# Controlled blasting at Tyndale borrow site

The Australian and NSW governments are jointly funding the Woolgoolga to Ballina Pacific Highway upgrade. Roads and Maritime Services' Pacific Highway Project Office, Pacific Complete and its contractor partners are working together to deliver the upgrade.

We will be using materials from the Tyndale borrow site to build the Woolgoolga to Ballina Pacific Highway upgrade. As part of this work controlled blasting will be carried out from early June for about 14 months, weather permitting.

# What is happening?

The Woolgoolga to Ballina project team will use drilling and controlled blasting to break up hard rock located within the Tyndale borrow site.

Controlled blasting involves drilling a series of holes in a predetermined pattern in a section of hard rock, then loading the holes with appropriately sized explosives and detonating to break the hard rock ready for excavation, crushing, screening, stockpiling and transporting.

# When and how often will controlled blasting occur?

Controlled blasting will take about 15 minutes with up to two blasts per week, weather permitting.

Blasting may be carried out between:

- 9am and 5pm weekdays
- 9am and 1pm on Saturdays.

# How will controlled blasting affect you?

Exclusion zones within 300 metres of the blast area will be in place during each controlled blast. There will be minimal potential noise and vibration effects outside the exclusion areas.

# Why do we need controlled blasting?

Controlled blasting is the most efficient way to remove about 270,000 cubic metres of rock from within the borrow site.

#### What we will do?

### Keep you informed

We will provide advance notice of all controlled blasting, any road closures and changes to dates and times on the project website.

The project team will liaise with residents and property owners within one kilometre of the controlled blast area in advance including advice via email and SMS, 24 hours before each controlled blast takes place.

#### Manage the impact of controlled blasting

We have strict environmental controls related to managing noise and vibration. Controlled blasting will be completed in accordance with the project's Conditions of Approval and Construction Environment Management Plan.

## Monitor the impact of controlled blasting

We monitor the noise, vibration and air blast overpressure (air pushed outwards from the source of an explosion) of each blast so we can compare expected results to actual results and refine blast design where necessary.

#### **Control vibration**

Vibration is controlled by adjusting the size and timing of the maximum instantaneous charge (MIC), which is the amount of explosive detonated at any particular instant.

The size of the MIC is adjusted so the limits for ground vibration and air blast over pressure for each sensitive receiver are not exceeded.

The size of the MIC is managed by using delays on the detonators so the controlled blast is set off in a predetermined sequence and by reducing or extending the length of each controlled blast.

The data recovered from the monitoring of each controlled blast, including an initial trial blast, is compared to the predicted effects, to enable the project team to further refine and carefully control each blast.

# What we would like you to do

#### Your safety

To ensure the safety of residents and road users there will be an exclusion zone around the controlled blast site.

There will be restricted access around the work site.

Signage about traffic changes will be used for the safety of workers and the community.

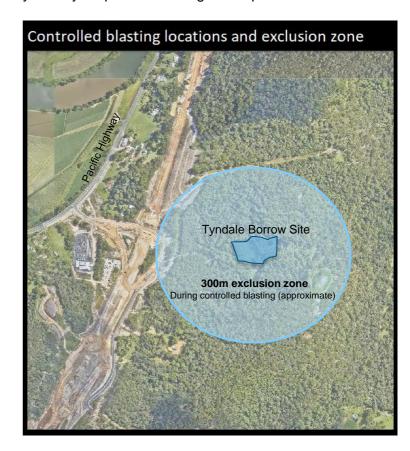
We appreciate your patience during this important work and ask that directions given by traffic controllers are obeyed to ensure the safety of residents, road users and workers.

# **More information**

If you have any questions, please contact the Woolgoolga to Ballina project toll free line on 1800 778 900 dial 1,

W2B@pacificcomplete.com.au or visit the project website rms.nsw.gov.au/W2B.

We apologise for any inconvenience and thank you for your patience during this important work.



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If you need help understanding this information, please contact the Translating and Interpreting Service on 131 450 and ask

them to call us on 1800 778 900.

