



# Pacific Highway Pavement Grinding Trial Frequently asked questions

Roads and Maritime Services | June 2018

#### What is a pavement grinding trial?

Pavement grinding is a method of pavement treatment which uses diamond saw blades to cut grooves into a plain concrete surface at specific intervals. The effect of the grinding process usually results in a smoother, more level pavement surface. This in turn produces a concrete texture which creates low noise characteristics. The result of this is generally lower tyre noise coming from the road surface.

#### What does the work involve?

Grinding will be performed using diamond blades mounted on a self-propelled machine designed for grinding and texturing pavement. The blades remove a thin layer of pavement and provide consistent depth grooves which may provide the benefit of noise reduction over existing pavement.

### Where is the grinding being done?

The trial will be conducted on two separate sections of the Pacific Highway near Valla Beach, totalling about six kilometres. The northern section extends from the low noise pavement near Valla Beach to the twin bridges at McGraths Creek. The southern section runs from Cow Creek bridge to the southern end of the low noise pavement near Valla Beach.





#### PACIFIC HIGHWAY UPGRADE NAMBUCCA HEADS TO URUNGA Pavement grinding locations





### Who is involved in the pavement grinding trial?

Roads and Maritime will work with an experienced contractor to carry out the pavement grinding. Acoustics specialists SLR Consulting Australia Pty Ltd will take noise measurements before and after the grinding and a community survey targeting residents closest to the work locations will also be done. The survey data will be analysed by independent consultants Articulous Pty Ltd and the outcomes published on the website.



#### What will the noise measurements involve?

SLR Consulting Australia Pty Ltd, an independent noise specialist, will take noise measurements before and after the grinding work. The objective of this study is to obtain technical road surface noise level data so as to test whether the grinding of the surface is effective in reducing noise. To do this, noise monitors will be placed at the road side to record noise data. These methods are known as Statistical Passby (SPB) method and On-Board Sound Intensity (OBSI) method. Noise monitors will not be placed at properties because too many variables exist between the road surface and properties to ensure we capture accurate data.

#### Why won't you monitor noise from properties?

The objective of this study is to obtain technical road surface noise levels to test whether the grinding of the surface is effective in reducing noise. The further away from the road surface that we record noise levels, the greater the chance the data is influenced by other factors.

#### How will the community survey be carried out?

The community survey will be done in two parts.

The first part of the survey will provide an opportunity for residents to record their perceptions about road noise as a baseline, before the pavement has been grinded. The second part of the survey will allow residents to record their perception of road-noise after the pavement grinding has been done.

Residents closest to the grinding locations will be provided paper surveys to complete. Other residents not in the direct vicinity of the trial locations can complete the online survey located at:

http://www.rms.nsw.gov.au/projects/northern-nsw/nambucca-heads-to-urunga/

#### When will the trial start?

Work is expected to start on 18<sup>th</sup> June

#### How long will the trial take?

The grinding work is expected to take 12 weeks, weather permitting. Roadside noise measurements will be taken before and after the grinding. A two-part community survey will also be carried out to determine whether residents notice a difference in noise before and after the road surface has been treated. We expect to have the results of the trial available in late 2018.

#### When will the community be advised of the results?

The results of the findings are expected to be published in late 2018.

#### How will we know if the trial is successful?

We will analyse the changes in noise levels at the road side along with feedback from the community survey to determine the effectiveness of the grinding work in the different locations. We will report on the outcomes of the trial to the community.



## What will this mean if the trial is successful? Will pavement grinding be carried out in other locations?

Outcomes of the trial will determine whether pavement grinding is a viable option for other parts of the Pacific Highway.

#### When will the grinding work take place?

Approved working hours will be 7am to 6pm Monday to Friday and 8am to 1pm Saturday

#### What will be the impacts of the work?

Dust impacts will be minimal as the grinding machine constantly sprays water to capture the dust, creating a slurry. The slurry is then captured and stored in a tank where it can be taken away for disposal.

The diamond grinding machine is quite noisy, however it moves progressively along the pavement so the impacts in particular areas will be for relatively short periods. Grinding operations can only occur during Roads and Maritime standard work hours.

Pacific Highway traffic will be impacted through the work with lane closures and speed reductions necessary to complete the work safely. Variable messaging signs will help inform road users of traffic impacts.

Traffic control will be in place to guide motorists through the area.

#### Will the highway be closed during this time?

The highway won't be closed during the grinding trial, however there will be some lane closures and speed reductions in place. The work involves using large machinery and grinding equipment which leaves insufficient room for vehicles to pass safely without these appropriate measures in place. We seek to maximise safety for all road users and workers while this work is carried out.

Further information on the trial is available on the project website at: <a href="http://www.rms.nsw.gov.au/projects/northern-nsw/nambucca-heads-to-urunga/index.html">www.rms.nsw.gov.au/projects/northern-nsw/nambucca-heads-to-urunga/index.html</a>

You can contact the project team on pacific.highway@rms.nsw.gov.au or by phoning 1800 653 092.

