COFFS HARBOUR BYPASS

E1.3 Community Agreement Report: Gatleys Portal – EPL 21766

Revision A - Coffs Harbour Bypass

FERROVIAL GAMUDA JOINT VENTURE

VERSION CONTROL

Revision	Date	Description
A	3/11/2023	Submission to EPA
B	13/11/2023	Redacted version for website with receiver addresses removed.

CONTENTS

TABLES

1 PURPOSE

This report details the consultation undertaken by Ferrovial Gamuda Joint Venture (FGJV) to obtain community agreement for out of hours works (OOHW) at the Gatleys Road Tunnel southern and northern portals.

This report has been prepared in accordance with EPL Condition E1.3 as detailed in Table 1 below.

TABLE 1: EPL REQUIREMENTS

Ref	Condition Requirement	Where Addressed
E1.3	The licensee must report to the EPA the community consultation and agreement process that was undertaken with the Community Affected Catchments. This report to the EPA must be: a) prepared in writing;	This Report
	b) detail the steps taken to fulfil the requirements of condition E1.2;	Section 4
	c) demonstrate that the Noise Sensitive Receivers understood the nature of the works and any predicted impacts, including that consideration was made of additional requirements relevant to the needs of culturally and linguistically diverse Noise Sensitive Receivers;	Section 4
	d) provide the script used during the community consultation with Noise Sensitive Receivers;	Section 4 Attachment A
	e) report community response and consent rates (including where no contact could be made) against the total community affected catchments, and must be broken down into response and consent rates based on sub-catchments that are delineated by affectation levels;	Section 5
	f) include a noise validation monitoring plan as required by E2.1; and	Section 6
	g) be submitted to the EPA at least 15 business days prior to any works that are the subject of the agreement being undertaken unless prior arrangements have been made with the EPA.	Noted.
	A copy of the report must be: a) kept by the licensee for the duration of this licence including on the premises, and made available to an EPA authorised officer on request; and b) be made available on the licensee's project website or another website approved in writing by the EPA for the duration of the OOHWs permitted under condition E1.1. (Personal details of Noise Sensitive Receivers must be omitted).	Noted. Following EPA agreement, a copy of this report will be uploaded to the Project website.

2 PROPOSED OOHW

In accordance with EPL Condition E1, FGJV has sought community agreement from noise sensitive receivers to undertake OOHW at the Gatelys Road Tunnel southern and northern portals (herein referred to as portal works) on Saturdays between 7am and 8am, and 1pm to 6pm.

Construction activities associated with the proposed portal works include:

- Excavation of the portal face with an Excavator (approximately 30 tonne) and haulage of material with dump trucks
- Installation and grouting of soil nails using a Telescopic Handler, Grout Mixer and Pump
- Installation of mesh and strip drains using an Elevated Work Platform (EWP), Telescopic Handler and Steel Cutting
- Spraying of shotcrete with a Shotcrete Pump, EWP and Concrete Agitator Truck

2.1 JUSTIFICATION

The portal works described above are critical activities that must be completed prior to the commencement of tunnel excavation. Currently, the construction of the tunnels is the biggest program risk for the Project with any delays pushing back Project opening and completion.

Currently the construction of the portals at Gatleys Road Tunnel is proving harder than initially anticipated as additional scope is required for ground stabilisation. As mentioned above, it is critical to maintain schedule of these activities and FGJV has mobilised additional resources to mitigate program delays. However, this response will only maintain the current duration and still result in a program delay.

Therefore, extended working hours on Saturdays will help FGJV to complete the portal works and hand over the work area for tunnel construction on time without delaying the overall Project program.

3 NOISE SENSITIVE RECEIVERS

Detailed noise impact assessments were undertaken using the Project's Noise Model Noisecheck to identify noise sensitive receivers predicted to experience noise levels above the daytime OOH noise management level (NML) and agreement would need to be sought from.

Four scenarios were modelled assuming works occurring at both the north and south portals at the same time to predict noise impacts associated with:

- Excavation of the portal face
- Soil nail installation
- Mesh and strip drain installation
- Shotcreting.

Noise Assessment Reports for the above scenarios are included in Attachment A.

Based on the modelling, worst-case noise impacts are predicted to occur during soil nail installation and are summarised in Table 2. A detailed breakdown of the predicted impacts for all work scenarios at each receiver address is provided in Table 4.

Of the nine receivers, two are affected by the works at the northern portal and the remaining seven are affected by works at the southern portal.

TABLE 2: PREDICTED NOISE IMPACT SUMMARY

Noise Category	dBA above NML	Northern portal affected receivers	Southern portal affected receivers	Mitigation
Noticeable	<5	1	7	-
Clearly Audible	5 to 15	1	0	N, R1, DR
Moderately Intrusive	15 to 25	0	0	V, N, R1, DR
Highly Intrusive	>25	0	0	V, IB, N, R1, DR, PC, SN

4 CONSULTATION SUMMARY

Five of the nine noise sensitive receivers were called and meetings held at their properties to inform them of the request for agreement to this work outside of approved construction hours on the Coffs Harbour bypass. The remaining four noise sensitive receivers were contacted via a doorknock.

All receivers were provided with a hardcopy letter detailing the Project's request for community agreement (refer to Attachment B). This written agreement also formed the script used during the consultation and included the following details:

- Description of the different construction activities proposed consistent with Section 2 above;
- Proposal for OOHW on Saturdays between 7am and 8am, and 1pm and 6pm;
- Map showing the location of the proposed works;
- Summary of the noise levels predicted consistent with Section 3 above;
- Mitigation measures to minimise impacts;
- Receiver's ability to withdraw agreement at any stage during the works; and
- Project contact details.

5 COMMUNITY RESPONSE & CONSENT RATES

Contact was made and consultation undertaken with 100 percent of the nine noise sensitive receivers. As detailed in Table 3, agreement to undertake proposed OOHW at the southern portal was 86 percent, which constitutes a substantial majority.

For the northern portal one out of two affected receivers agreed which constitutes 50 percent agreement. The receiver who agreed to the proposed OOHW was identified as clearly audible (7dBA above NML), whereas the receiver who did not agree was identified as noticeable (3dBA above NML). Given only two receivers are affected by the northern portal works and agreement was obtained for the receiver predicted to be more impacted by noise, FGJV believe 50 percent agreement in this instance constitutes a substantial majority.

A more detailed breakdown of the consultation undertaken with each receiver and their response is provided in Table 4.

TABLE 3: COMMUNITY AGREEMENT SUMMARY

Work Area	Total Affected Receivers	Agreement Received		Agreement Not Received	
		No.	%	No.	%
Southern portal	7	6	86	1	14
Northern portal	2	1	50	1	50

6 NOISE VALIDATION MONITORING PLAN

Noise validation monitoring of the proposed OOHW will be undertaken in accordance with the Project's approved Construction Noise and Vibration Monitoring Program (Appendix 7 of the Construction Noise and Vibration Management Plan).

In summary, noise monitoring is proposed during soil nail installation at locations representative of the worst-affected sensitive receivers at the southern and northern portals.

Where is found that worst-case noise impacts have not been captured on the initial monitoring event, additional monitoring will be undertaken to ensure actual noise levels are consistent with those predicted by the Project's noise model and presented in the Community Agreement Letter (Attachment A).

Noise validation monitoring has already been completed by FGJV for the other three works scenarios (Excavation, Mesh and Strip Drain Installation, and Shotcreting) to inform model predictions.

TABLE 4: NOISE SENSITIVE RECEIVER CONSULTATION AND CONSENT

Receiver No.	NCA	NML	Work Area	Worst-Case Noise Category	Consultation Summary		
					Contact Made?	Consultation Undertaken	Agreement Obtained?
1	19	40	North Portal	Noticeable	Yes	Phone call (did not want to meet)	No (informed, against)
2	18	40	North Portal	Clearly Audible	Yes	Phone call and meeting at property	Yes
3	19	40	South Portal	Noticeable	Yes	Phone call and meeting at property	Yes
4	19	40	South Portal	Noticeable	Yes	Phone call and meeting at property	No (informed, not against)
5	18	40	South Portal	Noticeable	Yes	Doorknock	Yes
6	18	40	South Portal	Noticeable	Yes	Doorknock	Yes
7	18	40	South Portal	Noticeable	Yes	Doorknock	Yes
8	18	40	South Portal	Noticeable	Yes	Phone call and meeting at property	Yes
9	18	40	South Portal	Noticeable	Yes	Phone call and meeting at property	Yes

ATTACHMENT A – NOISE ASSESSMENT REPORTS

Noise Assessment Report - Portal Works - Excavation, Day OOH

Date: 18/09/23

Created by: Anna Burke

1. Introduction

This report presents a noise assessment of portal works - excavation construction activity which is proposed to occur during the day ooh period (RMS CNVG OOHW1). This report presents the proposed activities, noise prediction results, an assessment against RMS CNVG requirements and details proposed noise management and mitigation measures.

2. Method

NoiseCheck is a 'front-end' 3-D noise prediction platform which adopts a database of predictions that are generated in third party proprietary software which conforms to ISO9613 Acoustics - Attenuation of Sound During Propagation Outdoors - Part 2: General Method of Calculation implemented to ISO/TR 17534-3:2015 requirements. The predictions consider source to receiver distance and height and the noise attenuation provided by ground and air absorption, topography, surrounding buildings and other solid objects and permanent noise barriers (where applicable). The typical height of plant and equipment is 2m. The noise predictions at surrounding single and double storey properties apply at 1.5m at the most affected facade. Predictions for apartment buildings with greater than two storeys apply at the worst affected floor and facade. This assessment presents the total LAeq noise level from all activities.

3. Works description

The work activities that have been assessed are shown in Figure 1. Details of the activities are provided in Table 1. All noise levels referenced are in dBA, Leq,15minutes.

Figure 1. Location of modelled plant and equipment

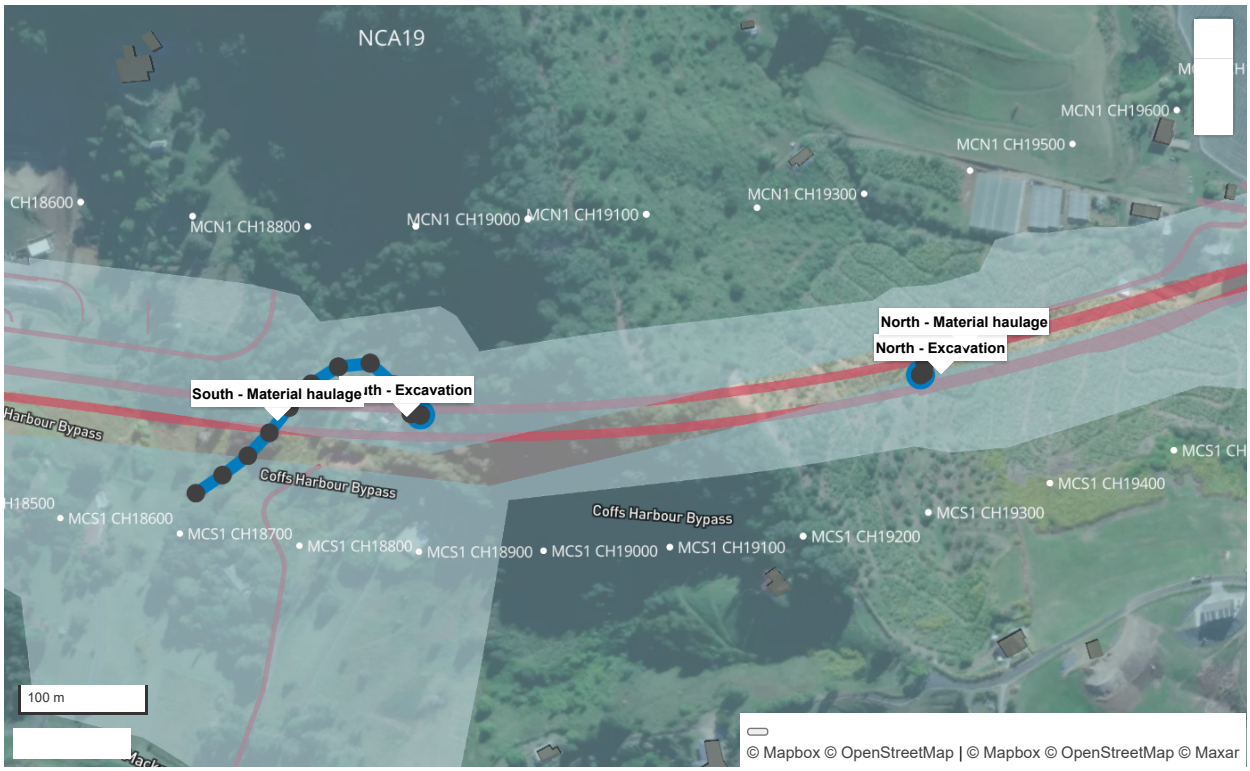


Table 1. Summary of modelled plant and equipment

Name	List of equipment	Duration	Sound power level	Annoyance penalty	Mitigation	Mitigation reduction	Notes
North - Excavation	Excavator (30 tonne)	50%	97 dBA	0 dBA		0 dBA	Duration dropped to 60% to reflect intermittent nature of works / minimal machine tracking during excavation works.
South - Excavation	Excavator (30 tonne)	50%	97 dBA	0 dBA		0 dBA	Duration dropped to 60% to reflect intermittent nature of works / minimal machine tracking during excavation works.
North - Material haulage	Articulated Dump Truck (Tipping Fill)	20%	101 dBA	0 dBA		0 dBA	Assumed duration of 3mins along haulage route
South - Material haulage	Articulated Dump Truck (Tipping Fill) , Articulated Dump Truck (Tipping Fill)	20%	104 dBA	0, 0 dBA		0 dBA	Assumed duration of 3mins along haulage route

Static noise Moving noise (continuous) Moving noise (staged)

4. Results

OOHW1

Based on the activities detailed above, noise levels above the NMLs have been predicted at several properties. The number of properties which exceed the NML for each land use surrounding the site are provided in the table below.

Table 2. Summary of predicted potential impacts at all surrounding land uses

Land use	Noticeable	Clearly audible	Moderately intrusive	Highly intrusive
	-	N, R1, DR	V, N, R1, DR	V, N, R1, DR
Residential	11	0	0	0

Noise Assessment Report - Portal Works - Soil Nails, Day OOH

Date: 12/09/23

Created by: Anna Burke

1. Introduction

This report presents a noise assessment of Gatleys Portal works - soil nails construction activity which is proposed to occur during the day ooh period (RMS CNVG OOHW1). This report presents the proposed activities, noise prediction results, an assessment against RMS CNVG requirements and details proposed noise management and mitigation measures.

2. Method

NoiseCheck is a 'front-end' 3-D noise prediction platform which adopts a database of predictions that are generated in third party proprietary software which conforms to ISO9613 Acoustics - Attenuation of Sound During Propagation Outdoors - Part 2: General Method of Calculation implemented to ISO/TR 17534-3:2015 requirements. The predictions consider source to receiver distance and height and the noise attenuation provided by ground and air absorption, topography, surrounding buildings and other solid objects and permanent noise barriers (where applicable). The typical height of plant and equipment is 2m. The noise predictions at surrounding single and double storey properties apply at 1.5m at the most affected facade. Predictions for apartment buildings with greater than two storeys apply at the worst affected floor and facade. This assessment presents the total LAeq noise level from all activities.

3. Works description

The work activities that have been assessed are shown in Figure 1. Details of the activities are provided in Table 1. All noise levels referenced are in dBA, Leq,15minutes.

Figure 1. Location of modelled plant and equipment

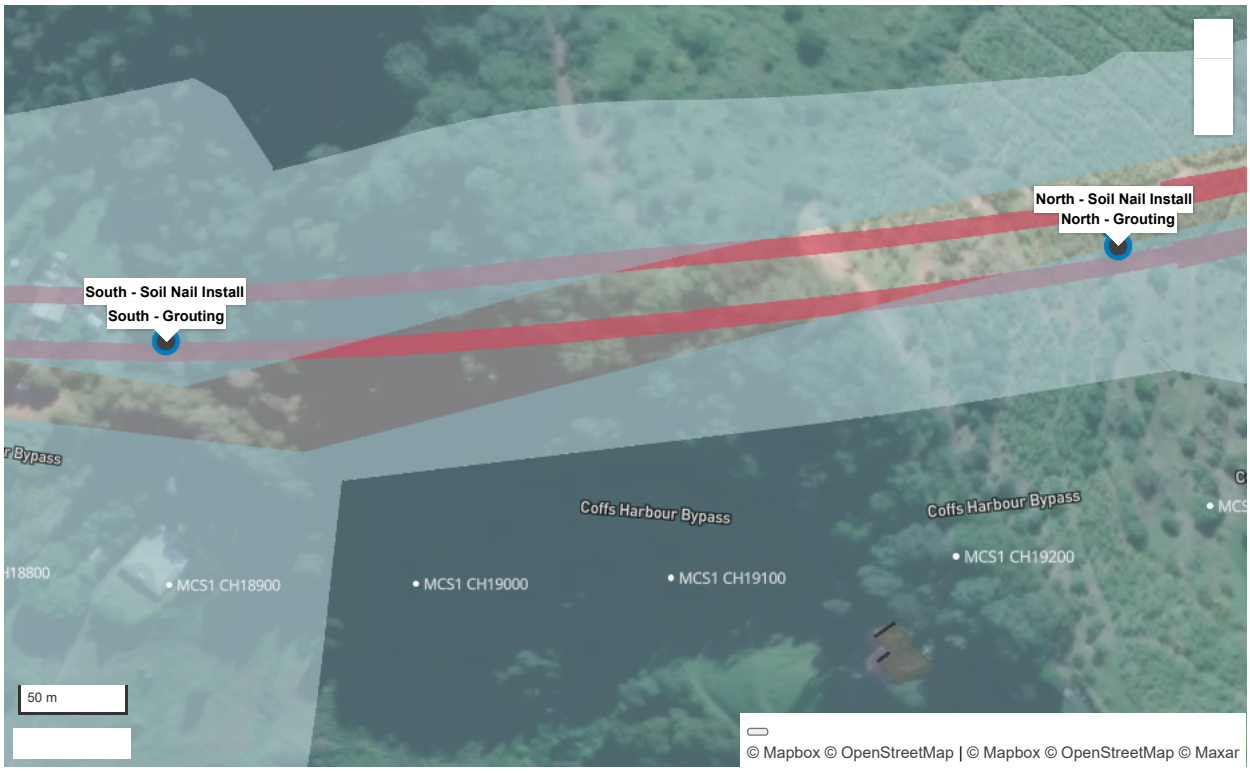


Table 1. Summary of modelled plant and equipment

Name	List of equipment	Duration	Sound power level	Annoyance penalty	Mitigation	Mitigation reduction	Notes
North - Soil Nail Install	Telescopic Handler	80%	104 dBA	0 dBA		0 dBA	Assumed telehandler manoeuvring for 12mins
South - Soil Nail Install	Telescopic Handler	80%	104 dBA	0 dBA		0 dBA	Assumed telehandler manoeuvring for 12mins
North - Grouting	Small Cement Mixer , Concrete pump	100%	103 dBA	0, 0 dBA		0 dBA	
South - Grouting	Small Cement Mixer , Concrete pump	100%	103 dBA	0, 0 dBA		0 dBA	

Static noise Moving noise (continuous) Moving noise (staged)

4. Results

OOHW1

Based on the activities detailed above, noise levels above the NMLs have been predicted at several properties. The number of properties which exceed the NML for each land use surrounding the site are provided in the table below.

Table 2. Summary of predicted potential impacts at all surrounding land uses

Land use	Noticeable	Clearly audible	Moderately intrusive	Highly intrusive
	-	N, R1, DR	V, N, R1, DR	V, N, R1, DR
Residential	9	1	0	0

Noise Assessment Report - Portal Works - Mesh / Strip Drains, Day OOH

Date: 18/09/23

Created by: Anna Burke

1. Introduction

This report presents a noise assessment of portal works - mesh / strip drains construction activity which is proposed to occur during the day ooh period (RMS CNVG OOHW1). This report presents the proposed activities, noise prediction results, an assessment against RMS CNVG requirements and details proposed noise management and mitigation measures.

2. Method

NoiseCheck is a 'front-end' 3-D noise prediction platform which adopts a database of predictions that are generated in third party proprietary software which conforms to ISO9613 Acoustics - Attenuation of Sound During Propagation Outdoors - Part 2: General Method of Calculation implemented to ISO/TR 17534-3:2015 requirements. The predictions consider source to receiver distance and height and the noise attenuation provided by ground and air absorption, topography, surrounding buildings and other solid objects and permanent noise barriers (where applicable). The typical height of plant and equipment is 2m. The noise predictions at surrounding single and double storey properties apply at 1.5m at the most affected facade. Predictions for apartment buildings with greater than two storeys apply at the worst affected floor and facade. This assessment presents the total LAeq noise level from all activities.

3. Works description

The work activities that have been assessed are shown in Figure 1. Details of the activities are provided in Table 1. All noise levels referenced are in dBA, Leq,15minutes.

Figure 1. Location of modelled plant and equipment

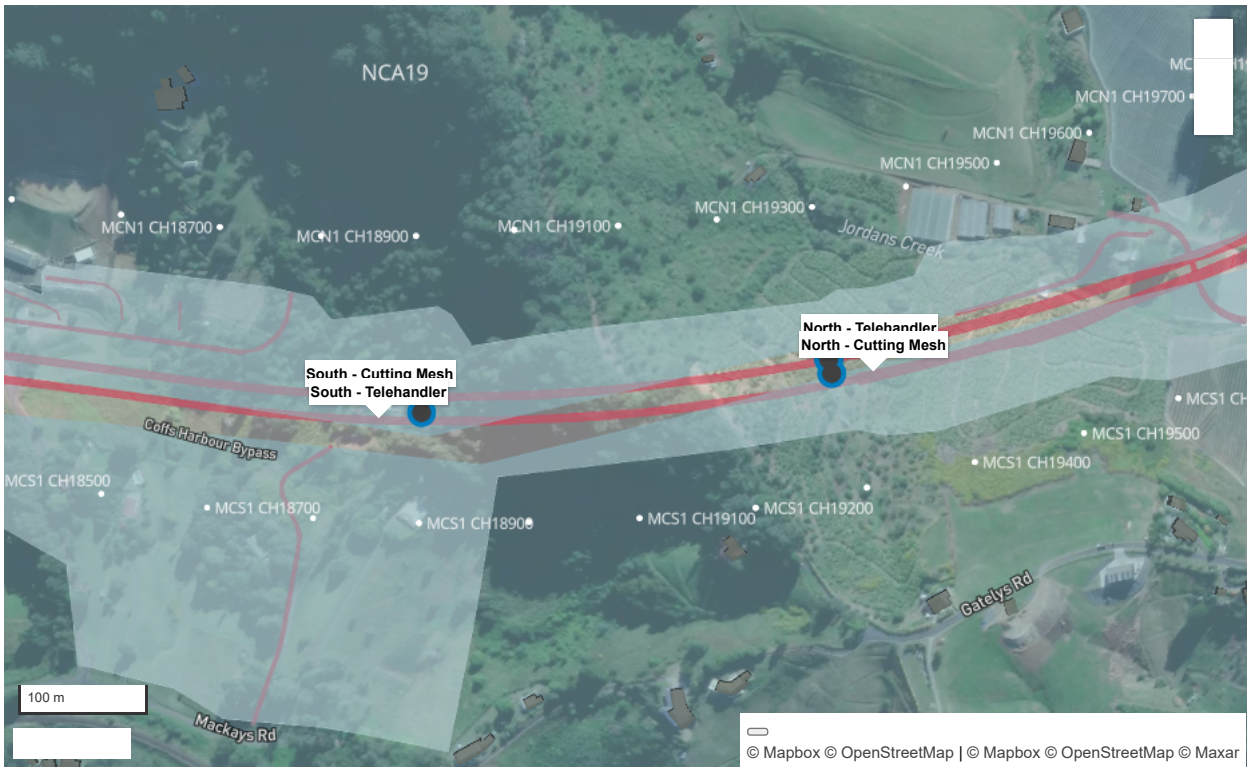


Table 1. Summary of modelled plant and equipment

Name	List of equipment	Duration	Sound power level	Annoyance penalty	Mitigation	Mitigation reduction	Notes
North - Telehandler	Telescopic Handler	33%	101 dBA	0 dBA		0 dBA	Telehandler stationary/idling for majority of 15min period while it holds mesh in place for workers to tie. Duration dropped to 5mins to reflect this.
South - Cutting Mesh	Angle Grinder (cutting steel mesh)	20%	90 dBA	5 dBA		0 dBA	Assumed to be operating for 3mins
South - Telehandler	Telescopic Handler	33%	100 dBA	0 dBA		0 dBA	Telehandler stationary/idling for majority of 15min period while it holds mesh in place for workers to tie. Duration dropped to 5mins to reflect this.
North - Cutting Mesh	Angle Grinder (cutting steel mesh)	20%	88 dBA	5 dBA		0 dBA	Assumed operating for 3mins.

Static noise Moving noise (continuous) Moving noise (staged)

4. Results

OOHW1

Based on the activities detailed above, noise levels above the NMLs have been predicted at several properties. The number of properties which exceed the NML for each land use surrounding the site are provided in the table below.

Table 2. Summary of predicted potential impacts at all surrounding land uses

Land use	Noticeable	Clearly audible	Moderately intrusive	Highly intrusive
	-	N, R1, DR	V, N, R1, DR	V, N, R1, DR
Residential	2	0	0	0

Noise Assessment Report - Portal Works - Shotcreting, Day OOH

Date: 27/09/23

Created by: Anna Burke

1. Introduction

This report presents a noise assessment of portal works - shotcreting construction activity which is proposed to occur during the day ooh period (RMS CNVG OOHW1). This report presents the proposed activities, noise prediction results, an assessment against RMS CNVG requirements and details proposed noise management and mitigation measures.

2. Method

NoiseCheck is a 'front-end' 3-D noise prediction platform which adopts a database of predictions that are generated in third party proprietary software which conforms to ISO9613 Acoustics - Attenuation of Sound During Propagation Outdoors - Part 2: General Method of Calculation implemented to ISO/TR 17534-3:2015 requirements. The predictions consider source to receiver distance and height and the noise attenuation provided by ground and air absorption, topography, surrounding buildings and other solid objects and permanent noise barriers (where applicable). The typical height of plant and equipment is 2m. The noise predictions at surrounding single and double storey properties apply at 1.5m at the most affected facade. Predictions for apartment buildings with greater than two storeys apply at the worst affected floor and facade. This assessment presents the total LAeq noise level from all activities.

3. Works description

The work activities that have been assessed are shown in Figure 1. Details of the activities are provided in Table 1. All noise levels referenced are in dBA, Leq,15minutes.

Figure 1. Location of modelled plant and equipment

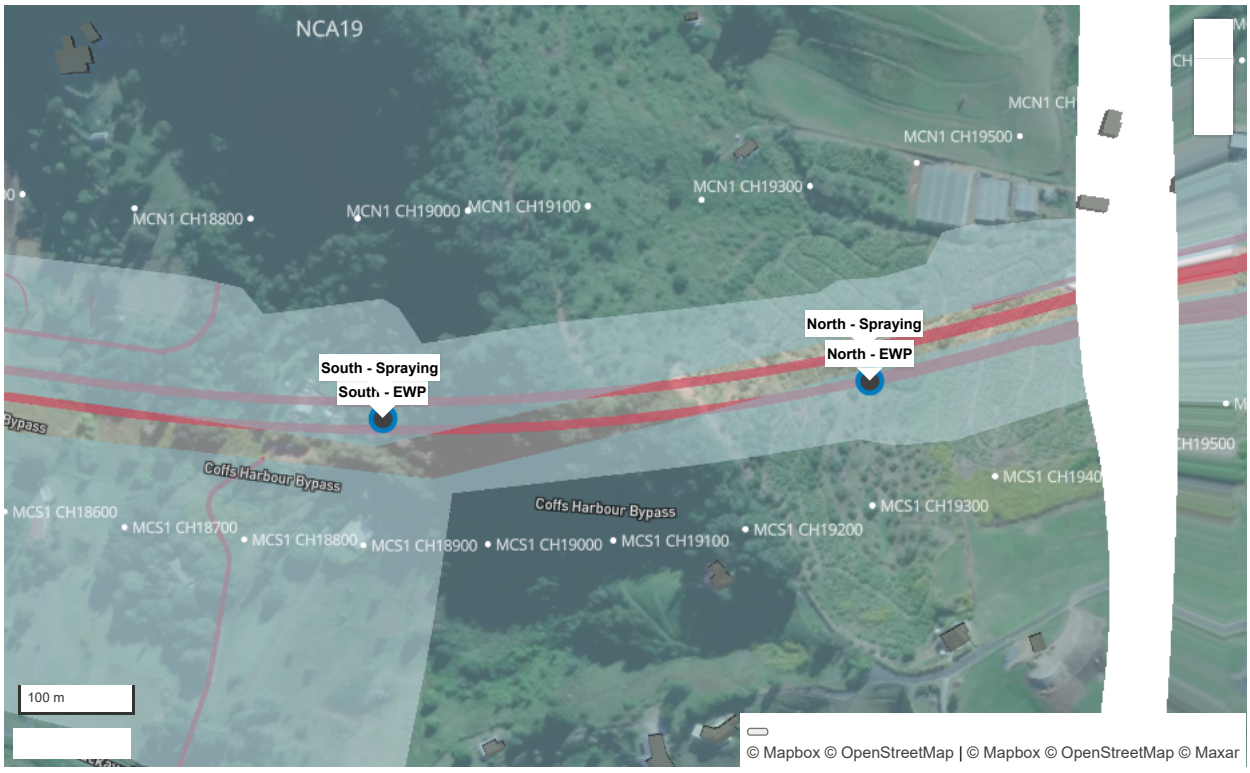


Table 1. Summary of modelled plant and equipment

Name	List of equipment	Duration	Sound power level	Annoyance penalty	Mitigation	Mitigation reduction	Notes
South - EWP	EWP	75%	94 dBA	0 dBA		0 dBA	
South - Spraying	Concrete Pump + Cement Mixer Truck (Discharging)	90%	101 dBA	0 dBA		0 dBA	
North - Spraying	Concrete Pump + Cement Mixer Truck (Discharging)	100%	101 dBA	0 dBA		0 dBA	
North - EWP	EWP	75%	95 dBA	0 dBA		0 dBA	

Static noise Moving noise (continuous) Moving noise (staged)

4. Results

OOHW1

Based on the activities detailed above, noise levels above the NMLs have been predicted at several properties. The number of properties which exceed the NML for each land use surrounding the site are provided in the table below.

Table 2. Summary of predicted potential impacts at all surrounding land uses

Land use	Noticeable	Clearly audible	Moderately intrusive	Highly intrusive
	-	N, R1, DR	V, N, R1, DR	V, N, R1, DR
Residential	4	0	0	0

ATTACHMENT B – COMMUNITY AGREEMENT LETTER

24 October 2023

Resident
Address
Coffs Harbour NSW 2450

Re: Agreement for work outside of approved construction hours on the Coffs Harbour bypass

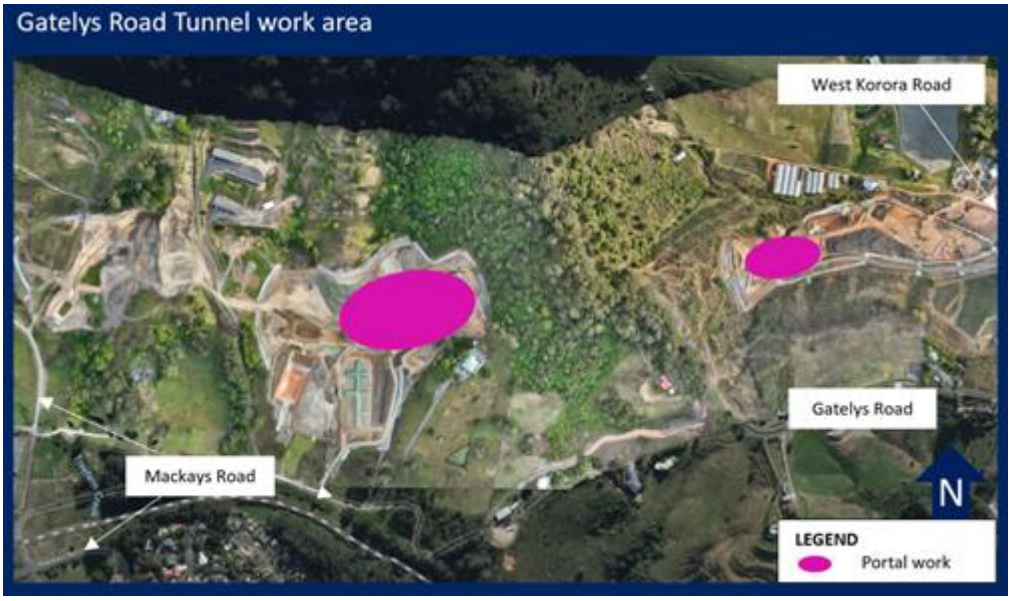
The Australian and NSW governments are funding the $2.2 billion, 14-kilometre Coffs Harbour bypass project. The bypass will boost the regional economy and improve connectivity, road transport efficiency and safety for local and interstate motorists.

As part of major construction, the Coffs Harbour bypass team is seeking your agreement to carrying out excavating and stabilising work outside of our approved construction hours between Mackays Road and Gatelys Road, Coffs Harbour until March 2024. This tunnel preparatory work will include:

- Excavating the portal areas
- Installing soil nails
- Installing mesh and drains
- Spraying shotcrete.

Our approved construction hours are from Monday to Friday from 7am to 6pm, and Saturday from 8am to 1pm. Our proposal for these activities is to work outside of approved construction hours on Saturdays from 7am to 8am and from 1pm to 6pm.

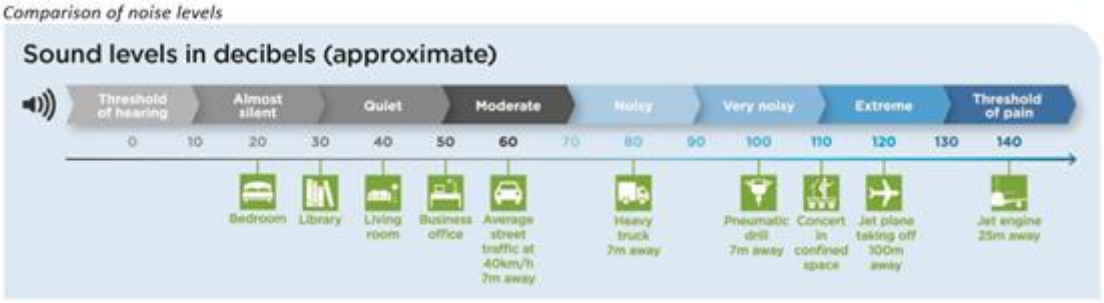
Location of work



Noise levels

The noise you are likely to hear during these activities includes engines from excavators, dump trucks, telehandler (similar to a large forklift), concrete trucks with agitators, shotcrete pumps and other small tools. The predicted noise levels are expected to be moderate in nature. A comparison of noise levels is provided below.

Comparison of noise levels



The project's Minister's Conditions of Approval (MCoA) sets strict requirements for work outside of standard construction hours and noise, vibration and dust management. To ensure compliance and mitigate impacts of this out of hours work, we:

- Consult and seek agreement with directly impacted residents ahead of the work starting
- Monitor noise levels, dust and vibration
- Use water carts, and soil binders to reduce dust where possible, focusing on high traffic areas within the project boundary
- Turn off plant and machinery when not in use
- Use non-tonal reversing beepers and instruct workers to keep noise to a minimum
- Position plant and equipment as far from nearby neighbours as possible.

Further agreements may be required for future work in the area, separate agreement will be sought if required.

Other out of hours work in this area

- Out of hours truck deliveries to work sites near Mackays and West Korora roads
- Out of hours refuelling and plant and machinery maintenance along the alignment
- Out of hours water cart and excavator operations on internal haulage routes at work sites near Mackays and West Korora
- Earthwork along the alignment – this may include extended hours on Saturdays

This program of work is a proposal we are seeking your agreement for. You are under no obligation to sign this agreement. By signing this document, you confirm that you agree to this work being done outside of approved construction hours between 6am to 7am and 1pm and 6pm on Saturday for tunnel preparatory work until March 2024. At any point you can withdraw this agreement by contacting the project team.

Contact

If you have an enquiry or complaint, please contact the project team on 1800 550 621 or community@chbteam.com.au

Translating and interpreting service

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 550 621

Conditions of agreement

Name: _____ Resident: _____

As the occupier of Address, I agree to the Coffs Harbour bypass project's request to work outside of approved construction hours as outlined in this agreement. This agreement covers the period from October 2023 to March 2024. I agree/do not agree to a copy of this document being provided to the NSW Environmental Protection Agency. I understand that I can withdraw this agreement at any time.

Signature_____Date: _____