

Warrell Creek to Nambucca Heads – Pacific Highway Upgrade Project

ENVIRONMENT PROTECTION AUTHORITY MONTHLY REPORT

February 2017

Pacifico Project Number: WC2NH



A team consisting of RMS and Pacifico (ACCIONA Ferrovial JV) to upgrade the Pacific Highway at Warrell Creek to Nambucca Heads

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1. Introduction

Environmental Protection Licence (EPL) 20533 was issued to ACCIONA Infrastructure for the Warrell Creek to Nambucca Heads Pacific Highway Upgrade project on the 16th December 2014. Condition R1.8 of the EPL requires the licensee to provide the EPA with a monthly report containing the following information:

- a) details of all non-compliances with the conditions of this licence and measures taken, or proposed, to prevent a recurrence of such a non-compliance; and
- b) details of all discharges from the sediment basins where the water quality results exceed the limits prescribed by Condition L2.4 including the results of rainfall measurements to demonstrate compliance with Condition L2.5; and
- c) details of results of any acoustic investigation made in relation to Condition L4.2d); and

The report referred to in this condition must be received by the EPA within 10 working days of the end of each month.

This document has been prepared to fulfil the requirements of Condition R1.8.

1.1 Description of Works

The project's construction activities during February 2017 included the following:

- Bitumen sealing work
- Clearing and Grubbing
- Topsoil stripping
- Earthworks
- Continuing bridge works including piling, headstock construction, pile caps, girder placement, deck unit installation and temporary work platforms
- Continuing drainage works
- Scour rock installation
- Continuing utility works
- Batter stabilisation using hydromulch (permanent design seed mix)
- Landscape Planting
- Topsoil Amelioration and Blending
- Concrete Lined Drains
- Basin Decommissioning
- Basin Maintenance including dewatering
- Installation of Erosion and Sediment Controls
- Pavement (Asphalt and Concrete)
- Line marking
- Operation of concrete and asphalt batch plants
- Removal of temporary bridge at Lower Warrell Creek

Works scheduled for next month include

- Earthworks including crushing
- Continuing bridge works including piling, headstock construction, pile caps, girder placement, deck unit installation and temporary work platforms

- Landscape Planting
- Continuing drainage works
- Scour rock installation
- Continuing utility works
- Batter stabilisation using hydromulch (permanent design seed mix)
- Topsoil Amelioration and Blending
- Concrete Lined Drains
- Basin Decommissioning
- Basin Maintenance including dewatering and desilting
- Installation of Erosion and Sediment Controls
- Paving operations including Asphalting and concreting
- Line marking Pavement (Asphalt and Concrete)
- Removal of temporary jetty at Nambucca River
- Commence removing rock platforms at Lower Warrell Creek and Nambucca River
- Underwater cutting of temporary piles at Lower Warrell Creek and Nambucca River

1.2 Consultation Activities

The project's consultation activities during February 2017 included the following:

Groups	Date	Key Topics
Environmental Review Group	07/02/17	Construction Progress, Design Update, Upcoming Works, Environmental Update, Monitoring Update, Out of Hours Works, Incidents and Community Complaints
Toolboxes	Wednesdays each week	Workforce behavioural issues examined and impact management tips provided, as appropriate. eg. Dust suppressing, mud impacts on local roads, reminder of media protocols.
North Facing Ramps group	10am Monday tri-weekly – session held 20 February	Three week look-ahead for construction activities and general project discussion.

Table 1 – Consultation Activities

Other Consultation Activities:

- Distributed notification for new Bald Hill Road bridge partial opening and new temporary road diversion
- Gained agreement from 3 residents for Bald Hill Road out of hours' line-marking
- Gained agreement from 1 resident for Albert Drive out of hours' line-marking

- Distributed notification for approval of new temporary asphalt plant to entire email distribution list, as well as letterbox distribution to 63 properties closest to the new facility (as per communications plan)
- Sought approval from RMS for quarry access bridge highway girder lift communications plan, notification and newspaper advertisement
- Provided input to RMS quarterly Project Update
- Ongoing and timely notifications and traffic alerts for night time girder deliveries through Macksville

At House Noise Treatments

The at house noise treatment program is currently being managed by RMS and is not part of the ACCIONA (Pacifico) Scope of Works and Technical Criteria.

Upcoming Community and stakeholder activities:

- Conduct first Community Information Session for 2017 scheduled for Wednesday 15 March (one only, at Warrell Creek construction compound)
- Conduct next North Facing Ramps tri-weekly roadside community meetings scheduled for Monday 13 March
- Distribute third edition notification of three-monthly North Facing Ramps look-ahead
- Seek agreements for out of hours work for the southern compound temporary asphalt plant, and out of hours work for asphalting on defined sections of the alignment
- Distribute quarry bridge access Pacific Highway girder lift communications plan, notification, and newspaper advertisement
- Project Update for Acciona website
- Continue to consult stakeholders impacted by visual mounds along the entire alignment
- Signposting communications plan (tie into mid-year Community Information Sessions)
- Continue to identify community groups for specific presentation of key messages second half of 2017.
- Fine-tune Landscaping Planting drawings with Nambucca Shire Council

2. Weather

2.1 Discussion

The automatic recording weather stations at the main site compounds (north and south) records rainfall totals daily at 9AM. The total rainfall received for the month is as follows: -

Month	Total monthly rainfall	Location
01/02/17 - 28/02/17	98.6mm	Northern Compound
01/02/17 - 28/02/17	71.2mm	Albert Drive Compound

The site experienced a total of 12 rain days throughout the month of February 2017.

During February, rainfall received on site was lower than the February monthly average of 171.3mm. A summary of weather conditions recorded over the month for Smoky Cape by the Bureau of Meteorology is detailed below in Table 2.3.

The daily summaries for rainfall received in February at the Albert Drive Compound and Northern Compound are shown below in Table 2.1 and 2.2.

February 2017										
		TOTAL Rain								
Date	Time	Gauge (mm)								
1/02/2017	9:00:00	0								
2/02/2017	9:00:00	0								
3/02/2017	9:00:00	0								
4/02/2017	9:00:00	0.2								
5/02/2017	9:00:00	0								
6/02/2017	9:00:00	0								
7/02/2017	9:00:00	0								
8/02/2017	9:00:00	4.8								
9/02/2017	9:00:00	6.8								
10/02/2017	9:00:00	2.6								
11/02/2017	9:00:00	0								
12/02/2017	9:00:00	0								
13/02/2017	9:00:00	0.6								
14/02/2017	9:00:00	1								
15/02/2017	9:00:00	2								
16/02/2017	9:00:00	0								
17/02/2017	9:00:00	0								
18/02/2017	9:00:00	7.8								
19/02/2017	9:00:00	0								
20/02/2017	9:00:00	14.8								
21/02/2017	9:00:00	0								
22/02/2017	9:00:00	0								
23/02/2017	9:00:00	0								
24/02/2017	9:00:00	0								
25/02/2017	9:00:00	0								
26/02/2017	9:00:00	2.8								
27/02/2017	9:00:00	6.8								
	1	21								

Table 2.1 – Rainfall recorded at Albert Drive Southern Compound AutomatedWeather Station

 Table 2.2 - Rainfall recorded at the Northern Compound Automated Weather

 Station

February 2017									
Date	Time	TOTAL Rain							
		Gauge (mm)							
1/02/2017	9:00:00	0							
2/02/2017	9:00:00	0							
3/02/2017	9:00:00	0							
4/02/2017	9:00:00	0							
5/02/2017	9:00:00	0							
6/02/2017	9:00:00	0							
7/02/2017	9:00:00	0							
8/02/2017	9:00:00	15							
9/02/2017	9:00:00	15.4							
10/02/2017	9:00:00	1.2							
11/02/2017	9:00:00	0							
12/02/2017	9:00:00	0							
13/02/2017	9:00:00	0							
14/02/2017	9:00:00	2.2							
15/02/2017	9:00:00	6.2							
16/02/2017	9:00:00	0.6							
17/02/2017	9:00:00	0							
18/02/2017	9:00:00	6.6							
19/02/2017	9:00:00	0.2							
20/02/2017	9:00:00	21							
21/02/2017	9:00:00	0							
22/02/2017	9:00:00	1.4							
23/02/2017	9:00:00	0							
24/02/2017	9:00:00	0							
25/02/2017	9:00:00	0							
26/02/2017	9:00:00	0.2							
27/02/2017	9:00:00	4.2							
28/02/2017	9:00:00	21.4							

	February 2017		
	Minimum	Maximum	
_	temperature	temperature	Rainfall
Date	(°C)	(°C)	(mm)
1/02/2017	22.1	33	0
2/02/2017	22.8	33.6	0
3/02/2017	22.2	31	0
4/02/2017	23.8	29.5	0
5/02/2017	22.8	29.2	0
6/02/2017	22.8	29	0
7/02/2017	23	32.9	0
8/02/2017	22	31.2	8.4
9/02/2017	23	30.2	1.8
10/02/2017	22.1	31.1	1.8
11/02/2017	23		0
12/02/2017			
13/02/2017		33.1	
14/02/2017	21.5	26.1	6
15/02/2017	18.9	29	9
16/02/2017	20	28.7	0
17/02/2017	23	28.2	0
18/02/2017	20.5	27.9	7.4
19/02/2017	21.5	26.8	0
20/02/2017	18.1	28.8	16.2
21/02/2017	19.3	31.4	0
22/02/2017	20	32	0
23/02/2017	21.5	30.6	0
24/02/2017	21.4	31.3	0
25/02/2017	20.6	32.1	0
26/02/2017	19.7	26	0
27/02/2017	18.4	22.9	4.2
28/02/2017	18.9	33	50.2
20,02,2011	.0.0		50.L

Table 2.3: Weather conditions recorded in February 2017 at Smoky Cape by the
Bureau of Meteorology.

3. Surface Water Monitoring

Pacifico have been provided trigger levels for baseline monitoring from RMS, these will be compared against monthly data as well as between upstream and downstream sites to determine works impact.

Monthly sampling was undertaken by ACCIONA (Pacifico):

Wet Sampling Event

A "wet" sampling (>10mm in 24 hours) was undertaken on the 10th February 2017, field testing and lab sampling was undertaken. Results are attached in Appendix A.

pH levels noted to be outside of trigger levels at:

Lower Warrell Creek recorded elevated pH levels upstream (7.33) and downstream (7.30). It is noted that levels decreased from upstream to downstream sites and are thus unlikely to be attributed to construction impacts. All controls were in place for the site, with no activities undertaken within the waterway.

Dissolved Oxygen (DO) noted to be below trigger levels at:

Upper Warrell Creek downstream (1.5mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. The reduced levels may be due to decaying vegetative matter within the waterway. Additionally, the elevated water temperature (26.78 C) may have contributed to the reduced levels. Upstream recorded level was 2.76mg/L. During the previous wet event in January 2017, upstream recorded low levels of DO (1.11mg/L), with downstream reading higher (2.45mg/L).

Lower Warrell Creek upstream (3.88mg/L) and downstream (4.96mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. It is noted that levels increased from upstream to downstream and are thus unlikely to be due to construction impacts. The reduced levels may be due to decaying vegetative matter within the waterway. Additionally, the elevated water temperature upstream (31.38 C) and downstream (31.23 C) may have contributed to the reduced levels.

Nambucca River upstream (6.1mg/L) and downstream (6.17mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. It is noted that levels increased from upstream to downstream and are thus unlikely to be due to construction impacts.. Additionally, these levels are within ANZECC criteria (5mg/L).

Conductivity note to be above trigger levels at:

Lower Warrell Creek upstream (26.2mS/cm) and downstream (26.1mS/cm). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. It is noted that levels increased from upstream to downstream and are thus unlikely to be due to construction impacts.

Metals noted to be above trigger levels at:

Stony Creek recorded elevated levels of manganese upstream (0.385mg/L) and downstream (0.115mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. It is noted that levels increased from upstream to downstream and are thus unlikely to be due to construction impacts. It is also noted that these levels are well within ANZECC criteria (1.9mg/L).

Lower Warrell Creek recorded elevated levels of arsenic upstream (0.002mg/L) and downstream (0.002mg/L). All controls were verified to be in place for the site with no construction activities undertaken within the waterway. It is noted that these levels did not change from upstream to downstream sites and are thus unlikely to be due to construction impacts. It is also noted that these levels are within ANZECC criteria (0.024mg/L).

Nutrients noted to be above trigger levels at:

Upper Warrell Creek recorded elevated levels of ammonia downstream (0.06mg/L). All controls were verified to be in place for the site with no construction activities undertaken within the waterway. It is noted that these levels are well within ANZECC criteria (0.9mg/L).

TSS noted to be above trigger levels at:

Stony Creek downstream recorded elevated TSS levels (14mg/L). All controls were verified to be in place for the site with no construction activities undertaken within the waterway. It is noted that these levels are well within ANZECC criteria (40mg/L). A potential source for the elevated levels is unsealed driveways which are located on Rosewood Road, runoff from them may have contributed to the elevated reading.

Wet Sampling Event

An additional "wet" sampling event (>10mm in 24 hours) was undertaken on the 20th February 2017, field testing was undertaken. Results are attached in Appendix A.

Turbidity (NTU) noted to be above trigger levels at:

Nambucca River upstream (111 NTU) and downstream (51.9 NTU). It is noted that levels decreased from upstream to downstream sites and are thus unlikely to be attributed to construction impacts. It is also noted that wind chop along the bank was stirring sediment from the bank up, which may have increased NTU levels to above trigger levels. Testing was undertaken at the lowest point of the tide, which may have also contributed to more sediment being stirred up due to the water level being closer to sediment on the bottom of the Nambucca River.

Dissolved Oxygen (DO) noted to be below trigger levels at:

Stony Creek upstream (0.81mg/L) and downstream (1.99mg/L). It is noted that levels increased from upstream to downstream sites and are unlikely to be attributed to construction impacts. A potential reason for this could be due to the breakdown of vegetative matter flushed into the waterway from the rain event, resulting in decreased DO levels once this entered the waterway.

Lower Warrell Creek downstream (4.42mg/L). All controls were verified to be in place for the site, with no construction activity being undertaken within the waterway. Decaying vegetative matter within the waterway is a possible reason for the slightly low levels.

Conductivity noted to be above trigger levels at:

Lower Warrell Creek upstream (25.5mS/cm) and downstream (26.4mS/cm). All controls were verified to be in place for the site, with no construction activity being undertaken within the waterway.

Dry Sampling Event

A "dry" sampling event was undertaken on the 23rd February 2017, field testing was undertaken. Results are attached in Appendix A.

pH levels noted to be outside of trigger levels at:

Lower Warrell Creek recorded elevated pH levels upstream (7.65) and downstream (7.60). It is noted that levels decreased from upstream to downstream sites and are thus unlikely to be attributed to construction impacts. All controls were in place for the site, with no activities undertaken within the waterway. It is also noted that these levels are within ANZECC criteria (pH 6.5-8.0).

Nambucca River recorded elevated pH levels upstream (8.05) and downstream (8.12). All controls were in place, with no works being undertaken within the waterway. The elevated levels are thus unlikely to be attributable to construction activities. It is noted that the trigger levels for Nambucca River are pH 7, with anything outside of this result being outside of trigger levels.

Turbidity (NTU) noted to be above trigger levels at:

Upper Warrell Creek recorded elevated levels downstream (22.7 NTU). All controls were verified to be in place for the site, with no activities being undertaken within the waterway. Upstream recorded lower levels (8.2 NTU). Readings for the January 2017 dry event showed a similar trend, with upstream recording lower levels than downstream (16.9 NTU upstream, 25.8 NTU downstream).

Stony creek recorded elevated levels downstream (8.0 NTU). All controls were verified to be in place for the site, with no activities being undertaken within the waterway. Upstream recorded lower levels (2.6 NTU). Readings for the January 2017 dry event were 9.6 NTU upstream, 3.3 NTU downstream.

Lower Warrell Creek recorded elevated levels downstream (13.2 NTU). All controls were verified to be in place for the site, with no activities being undertaken within the waterway. Upstream recorded lower levels (2.9 NTU). Readings for the January 2017 dry event also showed an increase from upstream (1.9 NTU) to downstream (5.4 NTU) sites but were within trigger levels.

Nambucca River recorded elevated levels downstream (24.5 NTU). All controls were verified to be in place for the site, with no activities being undertaken within the waterway. It is noted that wind chop was stirring sediment up with the water along the edge of the Nambucca River, which may have contributed to the exceedance. Upstream recorded lower levels (5.44 NTU). Readings for the January 2017 dry

event showed elevated levels for both upstream (44.5 NTU) and downstream (31.2 NTU) sites, with both exceeding trigger levels.

Dissolved Oxygen (DO) noted to be below trigger levels at:

Upper Warrell Creek upstream (0.16mg/L) and downstream (1.87mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. The reduced levels may be due to decaying vegetative matter within the waterway. It is also noted that levels increased from upstream to downstream sites and are thus unlikely to be as a result of construction activities.

Stony Creek upstream (1.66mg/L) and downstream (3.42mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. The reduced levels may be due to decaying vegetative matter within the waterway. It is also noted that levels increased from upstream to downstream sites and are thus unlikely to be as a result of construction activities.

Lower Warrell Creek upstream (4.40mg/L) and downstream (4.69mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. The reduced levels may be due to decaying vegetative matter within the waterway. It is also noted that levels increased from upstream to downstream sites and are thus unlikely to be as a result of construction activities.

Nambucca River upstream (5.44mg/L) and downstream (6.2mg/L). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. The reduced levels may be due to decaying vegetative matter within the waterway. It is noted that levels increased from upstream to downstream sites and are thus unlikely to be as a result of construction activities. It is also noted that these levels are within ANZECC criteria (5mg/L).

Conductivity was noted to be above trigger levels at:

Stony Creek downstream (0.411mS/cm). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. It is also noted that these levels are within ANZECC criteria (0.125-2.2mS/cm).

Lower Warrell Creek upstream (29.10mS/cm) and downstream (28.9mS/cm). All controls were verified to be in place for the site, with no construction activities undertaken within the waterway. It is noted that levels decreased from upstream to downstream sites, and are thus unlikely to be as a result of construction activities.

4. Sediment Basin Water Monitoring

Water was released from commissioned sediment basins after rainfall events on the 8th-10th, 14th-16th and 18th-20th February 2017. A statistical correlation has been developed which identified the relationship between Turbidity (NTU) and Total Suspended Solids (TSS) for water quality in the WC2NH Project sediment basins in order to determine the NTU equivalent of 50mg/L TSS. This statistical correlation has been developed to meet EPL Licence No 20533 Condition L2.7 to determine

compliance with the Water and/or Land Concentration Limits Condition L2.4. A positive correlation has been calculated between Total Suspended Solids (TSS) and Turbidity (NTU) ($R^2 = 0.5953$, p< 0.00001, n=184). The regression equation for the analytical results calculates a turbidity (NTU) value of 124.776 for a TSS value of 50mg/L. A safety factor of 30% has been applied to the NTU result of the correlation, providing a turbidity (NTU) value of 87.3432, rounded to an NTU value of 85. To measure NTU in the field a Horiba U-52G multi-parameter water quality meter has been utilised, which is maintained and calibrated in accordance with manufacturer's specifications. TSS sampling is being undertaken to ensure compliance with 1 in 10 sampling to validate the correlation.

Table 3 below has the water quality results recorded for the water release events:

	Die 5 - Walei		- <u>g</u> t	••••••••••••••••••••••••••••••••••••••			
Date	Basin ID	Oil and Grease (visible) (Limit = No visible)	рН (6.5- 8.5)	Turbidity (NTU) (Limit <90 NTU)	TSS (mg/L) (Limit <50mg/L)	Approx Volume Discharged (kL)	Comments
3/02/2017	B47.14	Ν	7.96	15.9		20	
4/02/2017	B49.67	Ν	7.6	17.7		20	
10/02/2017	B49.67	Ν	7.45	6.9		20	
10/02/2017	B43.37	Ν	7.1	77.8		100	
10/02/2017	B49.67	Ν	7.45	6.9		20	
10/02/2017	B53.03	Ν	7.91	28	9	200	
10/02/2017	B55.8	Ν	8.16	69.3		300	
11/02/2017	B45.00	Ν	7.35	35.2		200	
11/02/2017	B43.75	Ν	7.94	40.1		400	
11/02/2017	B45.64	Ν	7.61	50.3		300	
11/02/2017	B53.8	Ν	8.33	26.2		400	
13/02/2017	B55.17B	Ν	7.77	63.3	15	80	
13/02/2017	B53.5	N	7.73	19.6		400	
13/02/2017	B55.5	N	8.06	37.6		100	
17/02/2017	B57.7	Ν	7.21	19.6		150	
20/02/2017	B42.87	N	6.64	51.3		150	
21/02/2017	B53.8	N	8.26	29.3		300	
21/02/2017	B53.03	Ν	8.18	37.6	5	100	
21/02/2017	B59.85	Ν	8.01	36.7		300	
21/02/2017	B59.78	Ν	7.16	46.3		200	

 Table 3 – Water Release Register February 2017

Date	Basin ID	Oil and Grease (visible) (Limit = No visible)	рН (6.5- 8.5)	Turbidity (NTU) (Limit <90 NTU)	TSS (mg/L) (Limit <50mg/L)	Approx Volume Discharged (kL)	Comments
21/02/2017	B44.44	Ν	7.1	55	14	300	
21/02/2017	B49.67	N	7.54	14.2	7	150	
21/02/2017	B45.64	N	7.62	72.9	22	100	
21/02/2017	B49.20	N	8.41	40.1	8	200	
22/02/2017	B49.67	Ν	6.99	9.4		200	
22/02/2017	B60.87	Ν	7.83	19.6		150	
22/02/2017	B55.17B	Ν	6.89	31.6		80	
22/02/2017	B55.8	Ν	7.81	74.6		400	
22/02/2017	B43.75	Ν	6.71	63.7	19	250	
22/02/2017	B45.00	Ν	7.37	49.3		200	
23/02/2017	B58.45	Ν	7.61	19.6		200	
23/02/2017	B48.46	N	6.79	12.7		50	
23/02/2017	B49.67	N	6.75	19.4		100	
23/02/2017	B49.67	N	6.89	11.4		100	
23/02/2017	B60.3	Ν	7.01	26.9		100	

5. Noise Monitoring

Monthly routine construction noise monitoring was undertaken on the 16th and 20th of February 2017 at eight locations near to construction works. Monitoring results are available in Appendix A, Table 2.

All sites were within predicted levels for the activity being undertaken or were not the dominant noise source at the nearest residence.

6. Vibration Monitoring

Vibration monitoring was undertaken during vibratory rolling near residents at Old Coast Road on the 21st of February 2017. Monitoring results are contained in Table 5 Appendix A. Results were within limits to avoid building damage (5mm/s).

7. Dust Monitoring

Dust deposition gauges (DDG) were placed at nearby sensitive receivers from 3rd January 2017 to 2nd February 2017. DDG results are available in Appendix A.

All dust deposition gauges were below the level of concern for Total Insoluble Matter (TIM) and Ash Content (AC) (4g/m2.month or increase of 2g/m2/month) during the monitoring period.

Water cart usage outside of standard construction hours has been utilised to assist with reducing dust emissions from the project, during public holidays on Sundays throughout the Project. Pacifico is progressively stabilising cuts and fills that have reached their final profile.

8. Groundwater Monitoring

ACCIONA (Pacifico) have undertaken groundwater monitoring on 24th and 27th of February 2017. Field testing and lab sampling was undertaken. The results from the groundwater monitoring is available in Table 4 of Appendix A.

pH levels noted to be outside of trigger levels at:

4BH037a – Cut 12 (6.70). It is noted that this was only slightly above trigger levels (6.508) and that the bore has been relocated from its original location due to it being within the construction footprint.

Conductivity noted to be outside of trigger levels at:

4BH037a – Fill 15 (9.42mS/cm). It is noted that this bore had to be relocated from its original location due to it being within the construction footprint.

Water depth noted to be outside of trigger levels at:

4BH021 – Cut 11 (8.99m from top of casing slightly above the trigger level of 8.742m from top of casing). It is noted that rainfall has been lower than average for an extended period, and this may have contributed to the low water depth.

, above trigger level of 1.20m from top of casingIt is noted that rainfall has been lower than average for an extended period, and this may have contributed to the low water depth.

9. Acoustic Investigations

Acoustic Investigations (modelling) have been conducted and approved for several Out of Hours Works proposed to model impact on residents during the month of February 2017. A summary of these approvals is below in Table 4.

	>5dB(A) above	
OOH Request Title	background	Approval Date
Old Coast Road North Bridge crane setup	Ν	1/2/2017
Asphalt plant calibration	Ν	1/2/2017
Old Coast Road South sealing	Ν	9/2/2017
Crane demobilisation at Old Coast Road		
North Bridge	Ν	9/2/2017
Crane demobilisation Nambucca North Bank		
of Bridge	Ν	9/2/2017
Cut 21 long drainage	Ν	9/2/2017
Cut 21 subsoil installation	Ν	9/2/2017
Cut 21 SMZ trim	Ν	9/2/2017
Old Coast Road North Bridge installation of		
transfloor panels	Ν	15/2/2017
Piling at quarry access road bridge	Ν	15/2/2017
Backfill Pergola	Ν	22/2/2017
Lower Warrell Creek Bridge – Deck Pours	Ν	22/2/2017
Nambucca River Abutment B Steel Fixing	Ν	23/2/2017

 Table 4 – February Out of Hours Works approved under L4.2 (d) Acoustic Investigation (Modelled)

Other works outside of standard construction hours already approved under section L4.2 (d) of the EPL that took place during February 2017 were:

- Water cart usage over the weekend
- Running of various pumps and generators approved for use in previous months
- Northern Earthworks extended hours in sparsely populated area in the northern zone
- Nambucca River structures concreting works north of Pier 7 approved in previous months
- SMZ conditioning through the northern portion of the Project
- Concreting at Cut 2
- Wet curing in the pergola at cut 2
- Washout concrete paver CC05
- Old Coast Road North Bridge concreting, formworks, steel fixing
- Washing out of tipper trucks
- Refuelling in designated zones
- Floodplain Bridge 2 concreting works
- Old Coast Road North Bridge concreting works

Acoustic Investigations (field monitoring) have been conducted for several Out of Hours Works during the month of February 2017, results are included in Appendix A.

10.Complaints

9.1 Summary of Complaints for the month

No complaints against Acciona Ferrovial for the month of February 2017.

11.Non-Compliance

11.1 Summary of Non-compliances

No Non-Compliances against the ACCIONA Environmental Protection Licence (EPL) 20533 occurred in February 2017

Appendix A – Monitoring Results

		Nambucca River South Nambucca River South
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nsime nsime 0.25-2 0 0.304 0.2084 0.248 0.324 0.196 0.131 0.2024 0.255 0.309 0.2018 0.5092 26.1 0.842 0.334 1.1 0.842 0.334 - 0.842 0.344	- 48.42 1	12 12.65 45.9 48.42 12.65 46.8
NU 50 10 26.6 5.94 5.7 27.32 3.72 7.4 14.98 3.34 10.6 17.16 4.59 13.5 26.1 2.4 9.2 66.8 11.6 144 66.8 11.6 - 11.6 - 11.6 - 11.6 - 11.6 - 11.6 - 11.6 - 11.6	6 - 19.04 5	
Descrived Oxygen mgL 5 5 7.43 1.5 2.76 6.88 2.28 1.5 8.472 5.08 1.26 7.59 2.63 3.44 6.65 5.02 3.88 6.65 5.02 4.96 7.3 1.78 6.95 7.3 1.78 - 7.3	8 - 8.47 6	7 6.88 6.1 8.47 6.88 6.1
Dissolved Oxygen % 1 2 36.6 - 19.7 -		97.2 - 98.4
TDS gl		28.0 - 28.5
Taken from ANZECC guidelines 95% protected species levels where no 80/20 trigger values provided Sec.		
Taken from alternative trigger levels provided in ANZECC Water Guidelines Volume 1 and Volume 2 where insufficient data was available for 95%		
Exceedances of trigger values		

Table 1a - Surface Water Sampling Results February 2017 – Wet Event

Table 1b – Surface Water Results February 2017 – Wet Event

ocation	Units	Levels of	Concern	U	pper Warrell Cre	ek	ι	Ipper Warrell Cre	ek		Stony Creek			Stony Creek		Lo	w er Warrell Cre	ek	L	ow er Warrell C	reek	Unname	ed Creek Gumma	West	Unnan	ned Creek Gum	ima East	Unnan	med Creek Gumm	a North	Na	ambucca River So	outh	Ne	lambucca River So	outh		
			Upstream Dow nstream					Upstream			Dow nstream		Upstream			Dow nstream			Upstream			Upstream			Dow nstream			Upstream			Dow nstream							
reshwater / Estuarine		ANZECC 2000 95% spec		ZECC 2000 95% species Fr		Freshw ater		Freshw ater		Freshw ater			Freshwater		Freshwater		Freshw ater			Freshw ater			Freshwater			Freshw ater			Estuarine			Estuarine						
Date of Sampling	protected		protected						20-Feb-17			20-Feb-17			20-Feb-17			20-Feb-17			20-Feb-17		20-Feb-17				20-Feb-17			20-Feb-17		20-Feb-17			20-Feb-17			
Time of Sampling		Freshw ater Marine			3:03 PM			2:55 PM			2:37 PM			2:29 PM	2:29 PM		1:22 PM	1:22 PM		1:17 PM		2:11 PM			1:50 PM			1:45 PM		1:04 PM		12:56 PM						
Comments																									Unable to s	ample - water	level too low	Unable to :	sample - water le	evel too low	Wind c	hop - sediment st	tirred up	Wind c	chop - sediment s	stirred up		
Туре				80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result		
ab Physical data (no field data available)																																						
Temperature	°C	-	-	24.3	16.27	25.86	24.52	16.79	26.92	23.98	17.36	24.09	24.7	17.65	23.31	25.9	19.5	28.67	25.9	19.5	29.48	25.84	19.1	27.23	25.84	19.1	-	25.84	19.1	-	26.56	21.32	29.79	26.56	21.32	29.11		
ЭH	pH	-	6.5-8	7.478	6.23	7	7.192	6.42	7.11	7.138	6.61	6.6	6.98	6.21	6.69	6.86	6.46	6.98	6.86	6.46	6.59	6.9	6.08	6.52	6.9	6.08	-	6.9	6.08	-	7.56	6.58	7.41	7.56	6.58	7.33		
Conductivity	mS/cm	0.125-2.2		0.3204	0.20184	0.217	0.3242	0.19076	0.244	0.313	0.2024	0.258	0.309	0.20188	0.26	20.918	0.50928	25.5	20.918	0.50928	26.4	0.842	0.334	1.96	0.842	0.334	-	0.842	0.334	-	48.42	12.65	44.9	48.42	12.65	44.8		
Turbidity	NTU	50	10	26.16	5.94	9.3	27.32	3.72	16.1	14.98	3.34	6.2	17.16	4.59	12.5	26.1	2.4	3.9	26.1	2.4	10.8	66.8	11.6	256	66.8	11.6	-	66.8	11.6	-	19.04	5.81	111	19.04	5.81	51.9		
Dissolved Oxygen	mg/L	5	5	7.43	1.5	0.49	6.88	2.28	2.86	8.472	5.08	0.81	7.59	2.63	1.99	6.65	5.02	5.4	6.65	5.02	4.42	7.3	1.78	7.58	7.3	1.78	-	7.3	1.78	-	8.47	6.88	6.45	8.47	6.88	7.68		
Dissolved Oxygen	%			-		6.1	-		36.4	-		9.9	-		23.8	-		76.7	-		63.8	-		97.2	-		-	-		-	-		101.5	- /		109.5		
DS	g/L	-	-	-		0.142	-		0.161	-		0.168	-		0.169	-		15.8	-		16.4	-		1.26	-		-	-		-	-		27.4	-		27.3		
		Taken from	ANZECC gu	idelines 95%	protected sp	ecies levels	s where no 8	0/20 trigger v	alues provid	ed																												
		Taken from	alternative	trigger level	s provided ir	ANZECC W	/ater Guideli	nes Volume	1 and Volum	e 2 where ins	sufficient da	a was avail	able for 95%	6																								
		Exceedance	s of trigger	values																																		

Table 1c – Surface Water Results February 2017 – Dry Event

Location	Units	Levels o	Concern	ι	pper Warrell Cr	eek	U	Jpper Warrell Cr	eek		Stony Creek			Stony Creek		Ь	ow er Warrell Cr	eek	L	ow er Warrell (Creek	Unnam	ed Creek Gumma	West	Unnar	ned Creek Gurr	ima East	Unnan	ned Creek Gumm	na North	Na	mbucca River S	outh	N	ambucca River S	outh
					Upstream			Dow nstream			Upstream			Dow nstream			Upstream			Dow nstream	n		Upstream			Upstream			Dow nstream			Upstream			Dow nstream	
Freshwater / Estuarine		ANZECC 200	95% species		Freshw ater			Freshw ater			Freshw ater			Freshw ater			Freshw ater			Freshw ate	r		Freshw ater			Freshw ater			Freshw ater			Estuarine			Estuarine	
Date of Sampling		prot	ected		23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17			23-Feb-17	
Time of Sampling		Freshw ater	Marine		1:20 PM			1:07 PM			12:41 PM			12:28 PM			2:50 PM			2:40 PM			2:02 PM			1:45 PM			1:40 PM			2:28 PM			2:20 PM	
Comments																						Unable to s	ample - water lev	el too low	Unable to s	sample - water	level too low	Unable to s	sample - water l	evel too low				Win	d chop stirring se	diment
Туре				80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result	80th %ile	20th %ile	Result
Field Physical data																																				
Temperature	°C	-	-	24.86	14.99	25.44	25.1	16.3	27.32	24.4	16	23.2	26.46	15.94	22.22	27.9	18.4	28.72	27.9	18.4	29.65	26.5	16.3	-	26.5	16.3	-	26.5	16.3	-	27.9	18.1	28.79	27.9	18.1	28.72
pH	pН	-	6.5-8	7.25	6.48	6.68	7.3	6.4	6.97	7.5	6.6	6.71	7.33	6.26	6.75	7.02	6.57	7.65	7.02	6.57	7.6	7	6.1	-	7	6.1	-	7	6.1	-	7	7	8.05	7	7	8.12
Conductivity	mS/cm	0.125-2.2	-	0.316	0.232	0.238	0.348	0.227	0.265	0.348	0.227	0.272	0.3338	0.2168	0.411	20.946	0.679	29.10	20.946	0.679	28.9	0.808	0.4234	-	0.808	0.4234	-	0.808	0.4234	-	47.32	29.44	48.9	47.32	29.44	45.5
Turbidity	NTU	50	10	10.96	4	8.2	9.9	3.5	22.7	9.9	3.5	2.6	5.97	3.74	8	6.82	1.83	2.9	6.82	1.83	13.2	52.78	11.3	-	52.78	11.3	-	52.78	11.3	-	19.3	6.7	5.44	19.3	6.7	24.5
Dissolved Oxygen	mg/L	5	5	4.98	1.91	0.16	4.8	2.6	1.87	4.8	2.6	1.66	6.34	3.52	3.42	7.98	5.07	4.40	7.98	5.07	4.69	6.4	1.75	-	6.4	1.75	-	6.4	1.75	-	9.1	7.4	5.44	9.1	7.4	6.2
Dissolved Oxygen	%			-	-	2	-	-	23.8	-	-	19.9	-	-	40.3	-	-	63.5	-	-	68.6	-	-	-	-	-	-	-	-	-	-	-	85.8	-	-	96.1
TDS	g/L	-		-		0.156	-		0.172	-		0.177	-		0.267	-		18.000	-		17.9	-		-	-		-	-		-	-		29.8	-		27.7
																																		1		
		Taken from	ANZECC gu	idelines 95%	protected s	pecies levels	s where no 8	0/20 trigger	alues provid	ded																										
		Taken from	m alternative trigger levels provided in ANZECC Water Guidelines Volume 1 and Volume 2 where insufficient						sufficient da	ta was avai	able for 959	6																								
		Exceedance	es of trigger	values																																

Table 2 - Noise Monitoring Results February 2017

Date	Time	Location	Rec ID	NCA	NML	Activity	Predicted levels for activity	Laeq	Lafmax	Lafmin	LAF10	Laf50	LAF90	Principal sources/ operations	Construction noise dominant?	Corrective actions	Notes
16/02/2017	2:09 PM	Albert Drive	74	1	L 50	Cut	62	50.5	76.7	42.8	51.8	49.2	47	Loader	No	NA	Dominant noise highway, birds
20/02/2017	4:46 PM	Cockburns Lane	16	1	50	Cut	65	42.9	65.1	35.1	44.8	42.2	38.4	Excavator	No	NA	Construction not audible. Dominant noise source: highway
20/02/2017	3:30 PM	Bald Hill Rd	197	9	3 50	Cut	72	49.2	74.2	38.2	48.2	43.5	40.5	Excavator, roller, trucks	No	NA	Dominant noise sources: highway, local traffic
16/02/2017	12:35 PM	Letitia Rd	406	2	59	Cut	74	63	72.5	55	65.4	62.3	59	Water cart, roller, grader, excavator	Yes	NA	Within predicted levels
16/02/2017	12:03 PM	Mattick Rd	442	e	5 44	Cut	62	44.8	67.8	35.5	46.1	41.4	38.7	Trucks, water cart	No	NA	Dominant noise sources: birds, plane, power tools at residence
20/02/2017	11:35 AM	Nursery Rd	415	2	l 59	Cut	53	56	80	41	50.8	46.5	44.1	Crane	No	NA	Construction not audible. Dominant noise sources: highway, local traffic
20/02/2017	3:47 PM	Wallace St	148	(1)	3 50	Cut	47	64.4	83.8	46.8	64.6	54.9	50.5	Excavator, roller, trucks	No	NA	Construction not audible. Dominant noise sourcess: highway, local traffic
20/02/2017	5:20 PM	Gumma Rd	383	(1)	8 50	Bridgeworks	67	50	65.7	40.5	53.5	47.1	44.1	Excavator loading trucks	Yes	NA	Within predicted levels

Table 3 - Dust Monitoring Results January 2017 – February 2017

			DDG ID		DDG1	DDG2	DDG3	DDG4	DDG5	DDG6	DDG6N	DDG7	DDG8	DDG9NE	DDG9E	DDG A1	DDG A2
			Start date of sam	pling	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017	3/01/2017
			Finish date of san	npling	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017	2/02/2017
Analyte	Time Period	Unit	Levels of Concern	LOR													
	Current Month	g/m².month	4	0.1	0.3	0.6	0.6	0.5	0.5	1.8	1.2	0.5	0.9	0.3	0.2		
Ash Content		mg	N/A	1	6	11	11	8	8	32	22	9	16	6	4		
Asir content	Previous Month	g/m².month			0.4	1.1	0.4	0.4	0.3	1.5	1.4	1	NA	0.7	0.4		
	Change	g/m².month	Increase of 2		-0.1	-0.5	0.2	0.1	0.2	0.3	-0.2	-0.5	NA	-0.4	-0.2		
Combustible	Current Month	g/m².month	N/A	0.1	0.7	0.5	0.4	0.2	0.2	1.7	0.6	0.5	0.5	0.3	0.3		
Matter	current Month	mg	N/A	1	11	9	6	5	4	30	10	8	9	5	4		
Total	Current Month	g/m².month	4	0.1	1	1.1	1	0.7	0.7	3.5	1.8	1	1.4	0.6	0.5		
Insoluble	current Month	mg	N/A	1	17	20	17	13	12	62	32	17	25	11	8		
	Previous Month	g/m².month		0.1	0.5	3	0.4	0.4	0.3	1.9	2.1	1.3	NA	2.2	1.2		
Matter (TIM)	Change	g/m².month	Increase of 2	0.1	0.5	-1.9	0.6	0.3	0.4	1.6	-0.3	-0.3	NA	-1.6	-0.7		
Arsenic	Current Month	mg/L		0.001												<0.001	<0.001
Comments							Ants in gauge			Funnel broken - glass in gauge				Moths in gauge	Beetles in gauge	Bark in gauge	

Table 4 – Groundwater Monitoring Results February 2017

						<u> </u>			<u> </u>								-																				
Location	Units	Groundwater Investigation	4BH	007	4BH	1008		4BH01	0	4BH0	11	4	BH021		4	BH022c		4BH025	5	4	BH026		4E	BH037a	1	4BH03	38	4E	3H057		48	3H058c		4BH06	/1	4BH06	2
Cut/Fill		Levels (GILs) from Interpretive	- Cut 4 Us			- West S)	Cut 6	6 - Wes	st (DS)	Cut 6 - Eas	st (US)	Cut 1	I - West	t (DS)	Cut 1	1 - East (US)	Cut	12 - Wes	t (DS)	Cut 12	- East (US	5)	Fill 1	15 - We	est	Fill 15 - E	ast	Cut 17	- West (D	S)	Cut 17	′ - East (U	S) (Cut 23 - Wes	st (US)	Cut 23 - Ea	. ,
Date of Sampling		Report	27/02/	2017	27/02	2/2017	2	7/02/20	17	27/02/2	017	2	4/02/2017	7	27	7/02/2017		27/02/201	7	27	/02/2017		27/	/02/2017	7	27/02/20)17	27/	02/2017		24	/02/2017		24/02/20	17	24/02/20	17
			Trigger levels 80 / 20%ile	Results	Trigger levels 80 / 20%ile	Results	Trigger lev 20%il		Results	Trigger levels 80 / 20%ile	Results	Trigger le 20%	vels 80 / ile	Results	Trigger lev 20%il			evels 80 / ‰ile	Results	Trigger lev 20%ile (4LDBH	from Res	ults	gger level 20%ile		Results	Trigger levels 80 / 20%ile	Results	Trigger leve 20%ile		sults	gger leve 20%ile	els 80 / Re	sults	Trigger levels 80 / 20%ile	Results	Trigger levels 80 / 20%ile	Results
Comments				DRY		DRY			Water level too low to sample		Unable to sample								DRY		DI	RY			Ants in casing		Unable to sample			DRY					DRY		DRY
Field Physical data Depth to standing water	m	-	-	-	-	-	16.802		-	-		8.7420		8,99	16.0140	1.73	8.4500		-	14.4820		- 1.2	2000		1.87	1.3520		17.4120		- 13	.8440	16	6.38	-		-	
level from TOC pH	pН	-	-	-	-	-	6.264		-	-	-	6.7800			7.0900		6.7780		-	7.34			5080 5	5.9220	6.70	7.3040 6.768	D -	6.9800	5.2400				6.91	-	- 1	-	-
Conductivity	mS/cm	-	-	-	-	-	3630.000)	-	-	-	111.300		0.127	231.000	3.01	0.342		-	322.000		- 5.	.550		9.42	8366.000	-	121.100		- 13	2.660	0.	.129	-	- /	-	
Temperature	۰C	-	-	-	-	-	22.4420		-	-	-	22.3600		21.24	21.1500	24.96	22.604)	-	21.3000		- 25.	.9820		21.91	22.5600	-	22.8200		- 23	.1940	23	3.81	-	- 1	-	
		Exceedance o	f trigger leve																																		

Table 5 – Vibration Monitoring Result February 2017

DATE	TIME	Location	Vector Sum	Comment
[Date]	[Time]		[mm/s]	
2017-02-21	11:04:00	51 OCR	0.203	Background - no roller
2017-02-21	11:05:00	51 OCR	0.194	Background - no roller
2017-02-21	11:32:00	51 OCR	0.212	Background - no roller
2017-02-21	11:33:00	51 OCR	1.209	Roller 100m-30m - heavy vibe
2017-02-21	11:34:00	51 OCR	2.111	Roller 30m - heavy vibe
2017-02-21	11:35:00	51 OCR	2.692	Roller 30m - heavy vibe
2017-02-21	11:36:00	51 OCR	2.707	Roller 30m - heavy vibe
2017-02-21	11:37:00	51 OCR	2.861	Roller 30m - heavy vibe
2017-02-21	11:38:00	51 OCR	1.291	Roller 30m - heavy vibe
2017-02-21	11:39:00	51 OCR	2.712	Roller 30m - heavy vibe
2017-02-21	11:41:00	51 OCR	3.345	Roller 30m - heavy vibe
2017-02-21	11:42:00	51 OCR	1.289	Roller 30m - heavy vibe
2017-02-21	11:43:00	51 OCR	3.226	Roller 30m - heavy vibe
2017-02-21	11:44:00	51 OCR	2.861	Roller 30m - heavy vibe
2017-02-21	11:45:00	51 OCR	3.022	Roller 30m - heavy vibe
2017-02-21	11:46:00	51 OCR	1.64	Roller 30m - heavy vibe
2017-02-21	11:47:00	51 OCR	2.535	Roller 30m - heavy vibe
2017-02-21	12:10:00	53 OCR	1.461	Padfoot roller 30m - heavy vibe
2017-02-21	12:11:00	53 OCR	1.682	Padfoot roller 30m - heavy vibe
2017-02-21	12:12:00	53 OCR	1.854	Padfoot roller 30m - heavy vibe
2017-02-21	12:13:00	53 OCR	1.917	Padfoot roller 30m - heavy vibe
2017-02-21	12:14:00	53 OCR	1.7	Padfoot roller 30m - heavy vibe
2017-02-21	12:15:00	53 OCR	0.26	Background - roller static
2017-02-21	12:16:00	53 OCR		Background - roller static
2017-02-21	12:17:00	53 OCR	0.207	Background - no roller

Table 6 – Field Monito	ring for Out of Hours	Works February 2017

Description of Works	Date	Time	Location	NCA	NML	Calculated Laeq	Distance to receiver (m)	Compliant	Principal sources/ operations	Notes
Quarry Access Bridge Piling	18/2/2017	1:20pm	Scott's Head Road	3	50	52.8	176	Y	Removal of pile cases, gurney piles	2dB(A) is not discernible from background noise levels.
Backfilling Pergola	25/2/2017	7:30am	Cut 2	1	40	40.4	200	Y	Excavator	

Figure 1 – Acoustic Investigation (Modelling) Results February 2017

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Sound Adv	/ICe			
Noise Prediction and Name	to al			
Noise Prediction and Manageme	nt 100)			
Noise Impect Accessment Dep				
Noise Impact Assessment Rep	ort			
Report Details				
Report Date:	1/02/201		Report Reference:	BR12 Crane Set up
Company:	Pacific		Prepared by:	N.RUtherford
Proposed Works				
Date of Proposed Works:	04/02-12/02	Time of Proposed Works:	7am-Spm M-F	Wark Duration:
Description of Works	. ,			
Noise Prediction Details				
Expected Meteorological Conditions				
Wind Speed	Strong (16 - 21)		Wind Direction	South West
Cloud Cover	Clear		Temperature (Degrees C)	10 - 20 * C
Relative Humidity (%)	< 55%		Time of Day	Night (7pm-6am M-F, 4
Proposed Equipment				
Location	Number of Plant	Equipment	Usage Factor	Total Sound Power
Location 13	1	Crane - Crawler - > 400T	0.25	100
Location 13	3	Prime Movers	0.5	97
Location 13	1	EWP	0.75	88
Location 13	1	Hydraulic Power Pack	0.5	98
Location 13	1	Crane - 50 -100T (160kW)	0.5	101
Location 13	3	LV's	<25%	73
Noise Predictions				
Receiver ID	Criteria	Predicted LAng	Exceedance / Risk	Magnitude - dB(A)
518-18 SIDING ROAD, NORTH MACKSVILLE NSW 24	38.0	5.1	No / Type 1	
548-3 COCOS COURT, NAMBUCCA HEADS NSW 244		19.2	No / Type 1	
589-10 ALEXANDRA DRIVE, NAMBUCCA HEADS NSV		26.8	No / Type 1	
611-15 ALEXANDRA DRIVE, NAMBUCCA HEADS NSV		19.2	No / Type 1	
618-2 BANGALOW DRIVE, NAMBUCCA HEADS NSW		23.1	No / Type 1	
633-2 ROYALE COURT, NAMBUCCA HEADS NSW 24	44.0	23.1	No / Type 1	
- Risk:				
Type 1 - Complies with assessment criteria				
Type 2 - Low Risk - 0 to 2 dB(A) above assessment	criteria			
Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above a				
Type 4 - High Risk - More than 5dB(A) above asses	sment criteria			
Notes:				

Name:	
Date:	
Signature:	
Position:	
Required Mitigation Measures:	1

SoundAdvice

Noise Prediction and Managemen	t Tool				Pacific Highway Upgrade Warrell Creek to Nambucca Heads
Notes Income Comment					Chainage 52,400 - 54,300
Noise Impact Assessment Rep	ort				
Report Details					
Report Date:	9/02/2017		Report Reference:	Sealing OCR sidetra	ck
Company:	AFJV		Prepared by:	IH	
Proposed Works					
Date of Proposed Works:	2/11/2017	Time of Proposed Works:	1-4pm	Work Duration:	Saturday afternoon
Description of Works		Sealing works for OCR sidetrack to allow opening t	to traffic		
Noise Prediction Details					
Expected Meteorological Conditions					
Wind Speed	Strong (16 - 21)		Wind Direction	North East	
Cloud Cover	Clear		Temperature (Degrees C)	10 - 20 * C	
Relative Humidity (%)	< 55%		Time of Day	Extended Hours	
Proposed Equipment					
Location	Number of Plant	Equipment	Usage Factor	Total Sound Powe	ir .
Location 4	2	Street sweeper-Sweeping with dust suppression	0.25	98	
Location 4	1	Asphalt Sprayer 13T	0.5	89	
Location 4	4	Ute	<25%	75 75	
Location 3	4	Ute Asphalt Sprayer 13T	<25%	89	
Location 3	2	Street sweeper-Sweeping with dust suppression	0.25	98	
Noise Predictions			6		
Receiver ID 398-2 MATTICK ROAD, NORTH MACKSVILLE NSW 1	Criteria	Predicted LAeg	Exceedance / Risk No / Type 1	Magnitude - dB(A	1
402-83 OLD COAST ROAD, NORTH MACKSVILLE NSW		5.7 21.9	No/Type 1		
405-4 MATTICK ROAD, NORTH MACKSVILLE NSW		14.4	No / Type 1		
409-122 OLD COAST ROAD, NORTH MACKSVILLE N		17.8	No / Type 1		
414-18 MATTICK RDAD, NORTH MACKSVILLE NSW	37.0	14.4	No/Type 1		
429-124 OLD COAST ROAD, NORTH MACKSVILLE N		17.3	No/Type 1		
491-64 MATTICK ROAD, NORTH MACKSVILLE NSW		17.0	No / Type 1		
499-73 CHAMPIONS LANE, NORTH MACKSVILLE N		16.3	No/Type 1		
384-DP205344 BELLEVUE DRIVE, NORTH MACKSV		22.2 24.0	No / Type 1		
385-47 NURSERY ROAD, NORTH MACKSVILLE NSW 388-DP654625 NURSERY ROAD, NORTH MACKSVI		26.9	No/Type1 No/Type1		
325-1 GRANDVIEW DRIVE, NORTH MACKSVILLE N		17.6	No / Type 1		
397-36 OLD COAST ROAD, NORTH MACKSVILLE NS		29.5	No / Type 1		
400-51 OLD COAST ROAD, NORTH MACKSVILLE N		25.4	No / Type 1		
412-24 LETITIA CLOSE, NORTH MACKSVILLE NSW		29.2	No / Type 1		
406-20 LETITIA CLOSE, NORTH MACKSVILLE NSW		37.7	No / Type 1		
410-19 LETITIA CLOSE, NSW	48.0	30.3	No / Type 1		
486-41 LETITIA CLOSE, NORTH MACKSVILLE NSW 415-143 NURSERY ROAD, NORTH MACKSVILLE NS		22.7 21.6	No / Type 1 No / Type 1		
482-169 NURSERY ROAD, NORTH MACKSVILLE NS		22.3	No / Type 1		
31153-LOT 1 PACIFIC HWY, NORTH MACKSVILLE	48.0	41.1	No/Type 1		
Risk:					
Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessmen	t criteria				
Type 3 - Moderate Risk - 2dB(A) to 5dB	(A) above assessi	ment criteria			
Type 4 - High Risk - More than 5dB(A)	above assessment	t criteria			
Name:					
Dote:					
Signature:					
Position:					
Required Mitigation Measures:					_

	SoundAdv					B 10 10 1
Noise Impact Assessment Report Tayor Low I Tayor Low I	Noise Prediction and Managemen	t Tool				Pacific Highway Upgrade Warrell Creek to Nambucca Head
Statistics 36/2012 Agent Reference: Unree derauk BR12-PC Statistics 36/2012 The operation of the operati	Noise Impact Assessment Rep	ort				Chainage 54,300 - 50,400
Particity Play 2010 Provide Models Provide Models Concentral #12.42CF Proposed Works the of Phone Model Provide Models						
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20/20/2012 20/20/2012 20/20/2012 20/20						
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Spectra Metanological Conditions Strong [16 - 7.1] Dear down More functions North Lat Transportione [Degrees (7) 10 - 37 · 7 Night (Dear other 1, 20 · 10) Proposed Equipment Setting 1 A darker of Float a status 14 a stat					Work Duration:	Sunday
Spectal Metanardigetal Conditions Strong [16 - 7.2] Card Cover	Noice Prediction Datally					
Inter Started base Cover deter et Hansdäry (N) Store						
Name Cover (more shared larger) Description (more shared		Strong (16 - 21)		Wind Direction	North East	
Intered for Processed Equipment settion 4:19 Processed Equipment settion 3 Processed equipment settion 3 Processed equipment settion 1 3 Processed equipment settion 2 Ute 4356 settion 2 Ute 4356 settion 2 10 10 settion 2						
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Section 1. 3 Prime moviem +25% 90 Interestina 1. 2 Une +23% 35 Ablese Predictions						
senters 1 2 Ute 42% 75						
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Control D Controls Predicate/ Chag Excensioner / Enk Megnatule - dE(A) 053-47 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 11.1 No / Type 1 13-38 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 15.5 No / Type 1 13-38 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 15.5 No / Type 1 13-38 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 15.5 No / Type 1 43-38 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 5.6 No / Type 1 43-38 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 5.1 No / Type 1 43-38 CUL COAT FOAD, NORTH MACESTILLE NEW 31.0 5.1 No / Type 1 54-45 MATTER CRAD, NORTH MACESTILLE NEW 31.0 2.5 No / Type 1 55-00 COAST FOAD, NORTH MACESTILLE NEW 31.0 2.5 No / Type 1 55-10 FORTER, WILMONDT ORIVE, NAMBUCCA 31.0 31.3 No / Type 1 55-10 FORTER, NAMBUCCA IEAG STAVE NEW 31.0 1.3 No / Type 1 55-10 FORTER, NAMBUCCA IEAG STAVE NEW 31.0 2.2.9 No / Type 1 56 CUL COAST POAD, NORTH MACESTILLE NEW 31.0						
Address 31.4 No 7 Type 1 S54 MARTICK FOAD, NORTH MACKSVILLE NW 31.0 26.7 No 7 Type 1 1-38 GAL GOART MACKSVILLE NW 31.0 12.1 No 7 Type 1 1-38 GAL GOART MACKSVILLE NW 31.0 12.1 No 7 Type 1 1-38 GAL GOART MACKSVILLE NW 31.0 12.1 No 7 Type 1 1-38 GAL GOART MACKSVILLE NW 31.0 1.1 No 7 Type 1 38 OP 39965 MARTICK ROAD, NORTH MACKSVILLE NW 31.0 4.1 No 7 Type 1 38 OP 3395 MARTICK ROAD, NORTH MACKSVILLE NW 31.0 4.1 No 7 Type 1 35 GIA COAST ROAD, NORTH MACKSVILLE NW 31.0 3.1 No 7 Type 1 35 GIA COAST ROAD, NORTH MACKSVILLE NW 31.0 3.3 No 7 Type 1 35 GIA COAST ROAD, NORTH MACKSVILLE NW 31.0 3.3 No 7 Type 1 14-39 FLABERCK WILMOORT ORVE, MANBUCCA 31.0 3.3 No 7 Type 1 14-39 FLABERCK WILMOORT ORVE, MANBUCCA 31.0 3.2 No 7 Type 1 15 GOART ROAD, NORTH MACKSVILLE 31.0 2.2.9 No 7 Type 1 14-39 FLABERCK WILMOORT ORVE, MANBUCCA 31.0 3.2 No 7 Type 1 14-39 FLABERCK WILMOORT ORVE, MANBUCCA 31.0 2.2.9 No 7 Type 1 14-39 FLABERCK WILMOORT ORVE, MARUCCA 31.0 2.3						
65-4 MATTICK ROAD, MORTH MACESVILLE NW 3 38.0 26.7 No / Type 1 1.396 OLD COAST ROAD, MORTH MACESVILLE NW 38.0 15.5 No / Type 1 14-38 MATTICK ROAD, MORTH MACESVILLE NW 38.0 17.1 No / Type 1 44-38 MATTICK ROAD, MORTH MACESVILLE NW 38.0 17.1 No / Type 1 51-6 No / Type 1 10.0 10.0 51-7 No / Type 1 10.0 10.0 51-0 No / Type 1 10					Magnitude - dB(A)	
11-380 CUI COAST FOAD, NORTH MACKEVILLE N 38.0 15.5 No / Type 1 14-380 CUI COAST FOAD, NORTH MACKEVILLE N 38.0 17.1 No / Type 1 14-380 CUI COAST FOAD, NORTH MACKEVILLE N 38.0 17.1 No / Type 1 15.80 CUI COAST FOAD, NORTH MACKEVILLE N 38.0 17.1 No / Type 1 15.80 CUI COAST FOAD, NORTH MACKEVILLE N 38.0 4.1 No / Type 1 15.40 MATICK FOAD, NORTH MACKEVILLE N 38.0 4.1 No / Type 1 15.40 MATICK FOAD, NORTH MACKEVILLE N 38.0 2.5 No / Type 1 15.40 MATICK FOAD, NORTH MACKEVILLE N 38.0 2.5 No / Type 1 15.40 MATICK FOAD, NORTH MACKEVILLE N 38.0 3.5 No / Type 1 15.40 MATICK FOAD, NORTH MACKEVILLE N 38.0 3.5 No / Type 1 16.4397 FOAERCE WILMONT OWNE, NAMBUCCA 38.0 3.5 No / Type 1 15.3 CURREL'S FLACE, NAMBUCCA HEADS NEW 2. 38.0 32.0 No / Type 1 15.3 CURREL'S FOAEL STAND, NORTH MACKEVILLE 38.0 32.0 No / Type 1 15.3 CURREL'S FLACE, NAMBUCCA HEADS NEW 2. 38.0 32.0 No / Type 3 18.4 10.0 COAST FOAD, NORTH MACKEVILLE 38.0 32.0 No / Type 3 19.1 CORTH FOAD, NORTH MACKEVILLE 10.0 20.0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
14-38 MATTICK ROAD, MORTH MACKSVILL NUW 38.0 17.1 No / Type 1 14-38 MATTICK ROAD, MORTH MACKSVILL 38.0 5.6 No / Type 1 12-44 MATTICK ROAD, MORTH MACKSVILL NUW 38.0 2.5 No / Type 1 12-44 MATTICK ROAD, MORTH MACKSVILL NUW 38.0 2.5 No / Type 1 12-44 MATTICK ROAD, MORTH MACKSVILL NUW 38.0 2.5 No / Type 1 12-44 MATTICK ROAD, MORTH MACKSVILL NUW 38.0 2.5 No / Type 1 13-32 SPLDERKC WILMONT DRIVE, MANDUCCA 38.0 4.3 No / Type 1 13-32 SPLDERKC WILMONT DRIVE, MANDUCCA 38.0 3.3 No / Type 1 13-32 SPLDERKC WILMONT DRIVE, MANDUCCA 38.0 3.3 No / Type 1 13-3 SPLDERKC WILMONT DRIVE, MANDUCCA 38.0 3.3 No / Type 1 13-3 SPLDERKC WILMONT DRIVE, MANDUCCA 38.0 3.3 No / Type 1 13-3 SPLDERKC WILMONT DRIVE, MANDUCCA 38.0 3.2 No / Type 1 13-45 OLD COAST ROAD, MORTH MACKSVILLE 38.0 3.2 No / Type 1 13-45 OLD COAST ROAD, MORTH MACKSVILLE 38.0 3.2 No / Type 1 13-5 Complies with assessment orderia 23.9 No / Type 1 14-35 DLOAST ROAD, MORTH MACKSVILLE 38.0 3.3 No / Type 1 15-5 Complies with						
64-36 0.00 0.00 0.00 0.00 60-300 0.00 0.00 0.00 0.00 91-64 MATTICE ROAD, MORTH MACKSVILLE NSW 38.0 2.5 No / Type 1 92-64 MATTICE ROAD, MORTH MACKSVILLE NSW 38.0 2.5 No / Type 1 92-64 MATTICE ROAD, MORTH MACKSVILLE NSW 38.0 2.5 No / Type 1 93-25 MORTH MACKSVILLE NSW 38.0 3.5 No / Type 1 93-25 MORTH MACKSVILLE MSW 38.0 3.5 No / Type 1 14-35 TLOERRICK WILMONT DIWK, MANDUCCA 38.0 3.5 No / Type 1 13-5 OLD CAST ROAD, MORTH MACKSVILLE 10.0 38.0 3.0 No / Type 1 13-5 OLD CAST ROAD, MORTH MACKSVILL 38.0 3.0 No / Type 1 13-5 OLD CAST ROAD, MORTH MACKSVILL 38.0 3.0 No / Type 1 13-5 OLD CAST ROAD, MORTH MACKSVILL 38.0 3.0 No / Type 1 13-5 OLD CAST ROAD, MORTH MACKSVILL 38.0 3.2 No / Type 1 14-100 MALE ROAD, MORTH MACKSVILL 38.0 23.9 No / Type 1 15-5 MALE ROAD, MORTH MACKSVILL 38.0 1.2 No / Type 1 16-7 MARA - 0 To 200						
91-44 ARTTICE ROAD, NORTH MACKSVILLE NSW 38.0 2.5 Ne / Type 1 95-OLD COAST ROAD, NORTH MACKSVILLE NSW 38.0 35.1 Ne / Type 1 14-35 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.5 Ne / Type 1 14-35 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.5 Ne / Type 1 23-15 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.5 Ne / Type 1 23-15 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.3 Ne / Type 1 23-15 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.3 Ne / Type 1 23-16 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.2 Ne / Type 1 23-16 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.2 Ne / Type 1 23-16 FLDRERCE MILMONT DIVE, NAMBUCCA 38.0 1.2 Ne / Type 1 24-16 DUE DOAST ROAD, NORTH MACKSVILLE 38.0 1.2 Ne / Type 1 24-16 DUE DOAST ROAD, MORTH MACKSVILLE 38.0 1.2 Ne / Type 1 24-16 DUE DOAST ROAD, MORTH MACKSVILLE 38.0 1.2 Ne / Type 1 24-16 DUE DOAST ROAD, MORTH MACKSVILLE 38.0 1.2 Ne / Type 1 25 1.6 1.6 1.6 1.6 26 DUE DOAST ROAD, MORTH MACKSVILLE 38.0 1.2 Ne / Type 1 26 DUE DOAST ROAD, MORTH MACKSVILLE 38.0 1.2 Ne / Type 1 26 DUE DOAST ROAD, MORTH MACKSVILLE 38.0 1.2 Ne / Type 1 27 DE DUE DOAST ROAD, MORTH MACKSVILLE 1.6 1.6 1.6 27 DUE DUE DOAST ROAD, MORTH MACKSVILLE 1.6 <td></td> <td></td> <td>5.6</td> <td></td> <td></td> <td></td>			5.6			
95-012 COAST RUAD, NORTH MACKSMULE NYW 38.0 95.1 No / Type 1 03-195 FURDENCE WILMOOT DRIVE, NAMBUCCA 38.0 4.3 No / Type 1 14-397 FUDRENCE WILMOOT DRIVE, NAMBUCCA 38.0 1.3 No / Type 1 15-3 CHARLES FURDENCY TORINE, NAMBUCCA 38.0 1.3 No / Type 1 15-3 CHARLES FURDENCY TORINE, NAMBUCCA 38.0 1.2 No / Type 1 15-3 CHARLES FURDENCY TORINE, NAMBUCCA 38.0 1.2 No / Type 1 15-3 CHARLES FURDENCY TORINE, NAMBUCCA 38.0 1.2 No / Type 1 15-3 CHARLES FURDENCY TORINE, NAMBUCCA, NAMELON AND TORINE, NAMBUCCA 38.0 23.9 No / Type 1 164:						
Data 212 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 4.3 No / Type 1 14-397 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 1.5 No / Type 1 23-158 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 1.3 No / Type 1 23-158 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 1.3 No / Type 1 23-158 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 1.3 No / Type 1 23-158 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 1.2 No / Type 1 12-459 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 23.9 No / Type 1 12-459 FLOREINCE WILLINGNT DRIVE, NAMBULICCA 38.0 23.9 No / Type 1 14:-94 FOLD COAST FLOREINCE WILLING SUBJECT (THE TYPE TYPE TO THE TYPE TO						
Id=1397 (LUREINCE WILLOWOT DRIVE, NAMBUICCA 38.0 1.5 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 1.3 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 1.2 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 1.2 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 1.2 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 23.9 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 23.9 No / Type 1 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 23.9 No / Type 1 IS-4 Charles NSR AND ASSESSMENT CHARLES 38.0 38.0 38.0 38.0 IS-3 CHARLES FLACE, NAMBUICCA HEADS NSW 2: 38.0 38.0 38.0 38.0 IS-3 CHARLES FLACE NSW 2: 38.0 38.0 38.0 38.0 IS-3 CHARLES FLACE NSW 2: 38.0 38.0 38.0 39.0 IS-3 CHARLES FLACE NSW 2: 38.0 38.0 38.0 39.0 IS-3 CHARLES FLACE NSW 2: 38.0 38.0 39.0 30.0 IS-3 CHARLES FLACE NSW 2: 38.0 38.0 39.0 30.0 IS-4 CHARLES NSW 2: 38.0 38.0						
15-3 CHARLES PLACE, NAMBUCCA HEADS NOW 2- 18.0 2.3 No / Type 1 25-365 FLDRENCE WILMONT CHINK, NAMBUCCA 38.0 2.2 No / Type 1 16-45 CDL COXES FROAD, NORTH MACESVILLE 38.0 23.9 No / Type 1 16-45 Complies with assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Type 1 17-5 Time Risk - 0 to 2 dB(A) absee assessment criteria No / Time Risk - 0 to 2 dB(A) 17-5 Time Risk - 0 to 2 dB(A) Time Risk - 0 to 2 dB(A) Time Risk - 0 to 2 dB(A) 17-5 Time Risk -						
29-369 LOREINCE WILMONT CHIVE, NAMBUCCA 38.0 3.2 No / Type 1 18a-349 LOREINCE WILMONT CHIVE, NAMBUCCA 38.0 23.9 No / Type 1 1sk: ype 2 - Complies with assessmeet criteria ype 2 - Low fisk - 0 to 2 di(A) above assessment criteria ype 3 - Noderthin Soft(A) above assessment criteria ype 4 - High fisk - Mere than 55B(A) above assessment criteria ype 3 - Noderthin Soft(A) above assessment criteria ype 3 - Moderthin Soft(A) above assessment criteria						
isk: pp 1 - Complies with assessment criteria pp 2 - Woodset. Not 2014(1) above assessment criteria pp 4 - High Risk - More than S4B(A) above assessment criteria pp 4 - High Risk - More than S4B(A) above assessment criteria tota: Rearber from AQMP - Capturing closest residents Forme: Note: loginoture: loginoture:						
Varme: Varme:						
Veral Bisk - 0 to 2 dB(A) absex assessment offer la spe 3 - Moderate Risk - 208(A) to 5 dB(A) above assessment offer la votes: Verather from AGMP - Capturing closest residents Verather from AGMP - Capturing closest residents Verather from AGMP - Capturing closest residents Verather from AGMP - Capturing closest residents						
Aarme: Vate: Vate		I critteria				
Votes: Peather from AQMP - Capturing closest residents						
Varme: Date: ignature: Position:	lotes:					
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	equired Mitigation Measures:					7

SoundAdvice

Noise Prediction and Management Tool

Noise Impact Assessment Report

Pacific Highway Upgrade Warrell Creek to Nambucca Heads Chainage 50,500 - 52,400

Report Details Report Date: Company: 9/02/2017 Nambucca north demob crane Report Reference: AFIN Prepared by: JH **Proposed Works** Date of Proposed Works: Description of Works 11-12/2/17 Time of Proposed Works: 6am-7pm Sat, 7am-4pm Sun Work Duration: Sat+Sun Demobilisation of crane due to congestion in area **Noise Prediction Details** Expected Meteorological Conditions Wind Speed Strong (16 - 21) Wind Direction North East Clear < 55% Temperature (Degrees C) **Cloud** Cover 10 - 20 ° C Relative Humidity (%) Time of Day Night (7pm-6am M-F, 4pm-7am Sat, all day Sunday) **Proposed Equipment** Number of Plant Usage Factor Equipment Total Sound Power Location Location 14 Location 14 Prime mover Crane 200 - 300T Lifting load 0.25 94 2 99 **Noise Predictions** Receiver ID 204-46 WALL STREET, MACKSVILLE NSW 2447 Criteria Predicted LAeg Exceedance / Risk Magnitude - d8(A) No / Type 1 39.0 20.2 233-95 EAST STREET, MACKSVILLE NSW 2447 246-57 EAST STREET, MACKSVILLE NSW 2447 39.0 21.5 39.0 22.9 --73 EAST STREET, MACKSVILLE NSW 2447 394-60 GUMMA ROAD, GUMMA NSW 2447 39.0 39.0 22.5 27.6 386-32 GUMMA ROAD, MACKSVILLE NSW 2447 383-75 RIVER STREET, MACKSVILLE NSW 2447 39.0 39.0 31.9 31.7 No / Type 1 No / Type 1 166-65 RIVER STREET, MACKSVILLE NSW 2447 139-55 RIVER STREET, MACKSVILLE NSW 2447 39.0 39.0 46.0 29.7 27.0 No / Type 1 No / Type 1 355-15 BELLEVUE DRIVE, NORTH MACKSVILLE NSV 28.0 No / Type 1 384-DP205344 BELLEVUE DRIVE, NORTH MACKSVI 385-47 NURSERY ROAD, NORTH MACKSVILLE NSW 46.0 46.0 31.4 No / Type 1 No / Type 1 39.8 388-DP654625 NURSERY ROAD, NORTH MACKSVIL 325-1 GRANDVIEW DRIVE, NORTH MACKSVILLE N 46.0 35.8 25.3 No / Type 1 No / Type 1 Risk: Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessme et criteria

Type 4 - High Risk - More than 5dB(A) above assessment criteria

Notes: Weather from AQMP

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equired Mitigation Measures:

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Noise Prediction and Manageme	Int Tool				Pacific Highway Upgrade
Noise Prediction and manageme					Warrell Creek to Nambucca Head Chainage 56,400 - 58,400
Noise Impact Assessment Rep	ort				
Report Details					
Report Date:	9/02/203	7	Report Reference:	Cut 21 Longitudinal dr	ainage
Company:	AFI		Prepared by:	ЪН	
Proposed Works					
Date of Proposed Works:	11/2-14/4/2017	Time of Proposed Works:	7-4pm	Work Durotise;	Sat + Sun
Description of Works		Longitudinal drainage installation			
Noise Prediction Details					
Expected Meteorological Conditions					
Wind Speed	Strong (16 - 21)		Wind Direction	East	
Cloud Cover	Clear		Temperature (Degrees C)	30 - 20 ° C	
Relative Humidity (N)	< 55%		Time of Day	Night (7pm-6am M-F,	4pm-7am Sat, all day Sunday }
Proposed Equipment					
acation	Number of Plant	Equipment	Usege Fector	Total Saved Penner	
ocation 7	1	Excavator 201 - 501 - loading	0.5	105	
ocation 7	1	Trench roller	0.5	106	
Lecation 7	2	Wacker packer	0.5	97	
Noise Predictions					
Acceiver (D	Criteria	Predicted LAeg	Exceedance / Rok	Magnitade - dB(A)	
26-537 OLD COAST ROAD, NORTH MACKSVILLE P		16.0	No / Type 1	medianese . miled	
190-459 DLD COAST RDAD, NORTH MACKSVILLE N		31.7	No / Type 1		
92-469 OLD COAST ROAD, NORTH MACKSVILLE N		23.9	No / Type 1		
93-37 SIDING ROAD, NEWEE CREEK NSW 2447	38.0	18.0	No / Type 1		
95-OLD COAST ROAD, NORTH MACKSVILLE NSW	38.0	36.2	No / Type 1		
96-539 OLD COAST ROAD, NORTH MACKSVILLE P	N 38.0	23.0	No / Type 1		
97-72 SIDING ROAD, NEWEE CREEK NSW 2447	38.0	19.0	No / Type 1		
01-525 DLD COAST RDAD, NORTH MACKSVILLE P		24.4	No / Type 1		
03-219 FLORENCE WILMONT DRIVE, NAMBUCCA		16.6	No / Type 1		
05-1 SIDING ROAD, NORTH MACKSVILLE NSW 24		27.8	No / Type 1		
14-197 FLORENCE WILMONT DRIVE, NAMBUCCA		11.3	No / Type 1		
15-3 CHARLES PLACE, NAMBUCCA HEADS NSW 2		12.1	No / Type 1		
18-18 SIDING ROAD, NORTH MACKSVILLE NSW 2		22.7	No / Type 1		
29-169 FLORENCE WILMONT DRIVE, NAMBUCCA 32-23 CHARLES PLACE, NAMBUCCA HEADS NSW		9.0 11.1	No / Type 1		
43-33 CHARLES PLACE, NAMBUCCA HEADS NOW		8.2	No / Type 1 No / Type 1		
	540	6.4	out the r		
lisk:					
Type 1 - Complies with assessment criteria	a contractor				
Type 2 - Low Risk - 0 to 2 dB(A) above assessmen Type 3 - Mederate Risk - 2dB(A) to 5dB(A) above					
Type 5 - Moderate Risk - 200(A) to Sob(A) above Type 4 - High Risk - More than SdB(A) above asse					
type 4 - mgn Hitk - More than Solijk) above alte Notes:	Contraction of the state				

Name: Date: Signature: Position: **Required Mitigation Measures:**

SoundAdvice

Noise Prediction and Management Tool

Pacific Highway Upgrade Warrell Creek to Nambucca Heads Chainage 56 400 - 58 400

Noise Impact Accessment De-	ort				Chainage 56,400 - 58,400
Noise Impact Assessment Rep	ort				
Report Details					
Report Date:	9/02/201	7	Report Reference:	Cut 21 Subsoil	
Company:	AF	v	Prepared by:	HL	
Proposed Works					
Date of Proposed Works:	11/2-14/4/2017	Time of Proposed Works:	7-4pm	Work Duration:	Sat + Sun
Description of Works		Subsoil drainage installation			
Nalas Baselistica Datalla					
Noise Prediction Details					
Expected Meteorological Conditions					
Wind Speed	Strong (16 - 21)		Wind Direction	East	
	Clear		Temperature (Degrees C)	10 - 20 ° C	
Relative Humidity (%)	< 55%		Time of Day	Night (7pm-6am M-F	, 4pm-7am Sat, all day Sunday)
Proposed Equipment					
Proposed Equipment					
location	Number of Plant	Equipment	Usage Factor	Total Sound Power	
Location 7	1	Trencher	0.75	103	
Location 7	1	Positrack	0.5	97	
Location 7	1	Excavator <10T - loading	0.25	93	
Noise Predictions					
Receiver ID	Criteria	Deschoted L ten	Exceedance / Risk	Manaitude (214)	
		Predicted LAeq		Magnitude - dB(A)	
426-537 OLD COAST ROAD, NORTH MACKSVILLE N		11.6	No / Type 1		
490-459 OLD COAST ROAD, NORTH MACKSVILLE N		27.1	No/Type 1		
492-469 OLD COAST ROAD, NORTH MACKSVILLE N		19.3	No / Type 1		
493-37 SIDING ROAD, NEWEE CREEK NSW 2447	38.0	13.3	No/Type1		
495-OLD COAST ROAD, NORTH MACKSVILLE NSW	38.0	31.6	No / Type 1		
496-539 OLD COAST ROAD, NORTH MACKSVILLE N		18.4	No / Type 1		
497-72 SIDING ROAD, NEWEE CREEK NSW 2447	38.0	14.3	No/Type 1		
501-525 OLD COAST ROAD, NORTH MACKSVILLE N		20.0	No / Type 1		
503-219 FLORENCE WILMONT DRIVE, NAMBUCCA		12.4	No / Type 1		
505-1 SIDING ROAD, NORTH MACKSVILLE NSW 24	38.0	23.4	No / Type 1		
514-197 FLORENCE WILMONT DRIVE, NAMBUCCA	38.0	7.5	No / Type 1		
515-3 CHARLES PLACE, NAMBUCCA HEADS NSW 2	38.0	8.3	No / Type 1		
518-18 SIDING ROAD, NORTH MACKSVILLE NSW 2		18.3	No/Type 1		
529-169 FLORENCE WILMONT DRIVE, NAMBUCCA		5.6	No / Type 1		
532-23 CHARLES PLACE, NAMBUCCA HEADS NSW		7.3	No / Type 1		
543-33 CHARLES PLACE, NAMBUCCA HEADS NSW	38.0	5.D	No / Type 1		
Risk:					
Type 1 - Complies with assessment criteria					
Type 2 - Low Risk - 0 to 2 dB(A) above assessment					
Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above a					
Type 4 - High Risk - More than 5d8(A) above asses	ssment criteria				
Notes:					
Worst case wind direction					
Name:					
Date:					
					-
Signature:					- 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Position:					
Required Mitigation Measures:					
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SoundAdvice

Noise Prediction and Managemen					Pacific Highway Upgrade Warrell Creek to Nambucca Head Chainage 56,400 - 58,400
Noise Impact Assessment Rep	ort				annual and an
Report Details					
	# 30x3 /3x44			C	
teport Date:	9/02/201		Repart Reference:	Cut 21 SM2	
Company:	AFI		Prepared by:	н	
Proposed Works					
Date of Proposed Works:	11/2-14/4/2017	Time of Proposed Works:	7-4pm	Work Daration:	Sat + Sun
Description of Works		SM2 trimming			
Noise Prediction Details					
spected Meteorological Conditions	2000 B		7960760760	2633	
	Strong (16 - 21)		Wind Direction	East	
	Clear		Temperature (Degrees C)	10-20 ° C	ten Ten det ell des des des 1
leletive Humidity (%)	< 55%		Time of Day	Night (7pm-6am M-F,)	4pm-7am Sat, all day Sunday)
Proposed Equipment					
ecation	Number of Plant	Équipment	Usage Factor	Total Sound Power	
ocation 7	1	Grader	0.75	99	
acation 7	1	soth barrel roller 7T-Dynapac CA15-Moving with a		111	
Noise Predictions					
leceiver ID	Criteria	Predicted LAng	Exceedance / Risk	Magnitude - d0(A)	
26-537 OLD CDAST ROAD, NORTH MACKSVILLE N		13.7	No / Type 1		
90-459 OLD COAST ROAD, NORTH MACKSVILLE N		27.8	No/Type 1		
92-469 OLD CDAST ROAD, NORTH MACKSVILLE N		20.3	No / Type 1		
93-37 SIDING RDAD, NEWEE CREEK MSW 2447	38.0	15.7	No / Type 1		
95-OLD COAST ROAD, NORTH MACKSVILLE NSW	38.0	33.1	No / Type 1		
96-539 OLD COAST ROAD, NORTH MACKSVILLE N		20.0	No / Type 1		
57-72 SIDING RDAD, NEWEE CREEK NSW 2447	38.0	16.9	No / Type 1		
01-525 OLD CDAST RDAD, NORTH MACKSVILLE N		19.8	No/Type 1		
03-219 FLORENCE WILMONT DRIVE, NAMBUCCA		12.7	No / Type 1		
05-1 SIDING ROAD, NORTH MACKSVILLE NSW 24-		23.7	No / Type 1		
14-197 FLORENCE WILMONT DRIVE, NAMBUCCA		7.0	No / Type 1		
15-3 CHARLES PLACE, NAMBUCCA HEADS NSW 2-		7.4	No / Type 1		
18-18 SIDING RDAD, NORTH MACKSVILLE NSW 2-		18.1	No / Type 1		
29-169 FLORENCE WILMONT DRIVE, NAMBUCCA 32-23 CHARLES PLACE, NAMBUCCA HEADS NSW .		5.3 6.7	No / Type 1		
43-33 CHARLES PLACE, NAMEUCCA HEADS NSW :		4.1	No / Type 1 No / Type 1		
45-53 CHARLES FLACE, RAMIDOCCA REALS HIM .	38.0	41	Ho / Type 1		
lisk:					
ype 1 - Complies with assessment oritoria					
ype 2 - Low Risk - D to 2 dB(A) above assessment	oriberia				
ype 3 - Moderate Risk - 2d8(A) to 5dB(A) above a					
ype 4 - High Risk - More than 5dB(A) above asses					
iotes:					
Vorst case wind direction					
Vame:					
hate:					
ignature:					
Position:					
leguired Mitigation Measures:					
equires misgebon measures:					

SoundAdvice-Noise Prediction and Management Tool P: w Cł Noise Impact Assessment Report **Report Details** Report Date: 10/02/2017 Report Reference: Bearing Pad Preparation Company: Pacifico N.Rutherford Prepared by: Proposed Works Date of Proposed Works: 14-18 March Time of Proposed Works: 6-9pm Work Duration: Description of Works Noise Prediction Details Expected Meteorological Conditions Wind Speed Strong (16 - 21) Wind Direction North East Cloud Cover Clear Temperature (Degrees C) 20 - 30 ° C Relative Humidity (%) < 55% Time of Day Night (7pm-6am M-F, 4 Proposed Equipment Location Number of Plant Equipment Usage Factor Total Sound Power Location 13 Air Compressor 0.5 90 1 Location 13 3 Power Tools 0.5 91 Location 13 2 Rattle Gun 0.5 97 Location 13 z Daymakers (Tower lights) 1 93 Location 13 5 LV's <25% 75 Location 13 1 Scabbler 0.5 96 Location 13 2 Small Generator 0.75 93 Noise Predictions Receiver ID Criteria Predicted LAeg Exceedance / Risk Magnitude - dB(A) -- 273 UPPER WARRELL CREEK ROAD, CONGARINNI 40.0 4.9 No / Type 1 74-73 ALBERT DRIVE, WARRELL CREEK NSW 2447 40.0 13.1 No / Type 1 81-40 ALBERT DRIVE, DONNELLYVILLE NSW 2447 No / Type 1 40.0 21.3 No / Type 1 89-33 O'DELLS ROAD, DONNELLYVILLE NSW 2447 40.0 5.3 93-8 MAIN STREET, DONNELLYVILLE NSW 2447 40.0 9.9 No / Type 1 97-4723 PACIFIC HIGHWAY, DONNELLYVILLE NSW : 16.1 No / Type 1 40.0 100-17 ALBERT DRIVE, DONNELLYVILLE NSW 2447 40.0 11.3 No / Type 1 101-DP1072289, HENRYS LANE, WARRELL CREEL N: 36.0 3.1 No / Type 1 103-11 ALBERT DRIVE, DONNELLYVILLE NSW 2447 40.0 10.9 No / Type 1 163-4 SCOTTS HEAD ROAD, WAY WAY NSW 2447 40.0 22.2 No / Type 1 115-35 MAIN STREET, DONNELLYVILLE NSW 2447 40.0 10.0 No / Type 1 151-72 SCOTTS HEAD ROAD, WAY WAY NSW 2447 40.0 5.1 No / Type 1 112-4 SCOTTS HEAD ROAD, WAY WAY NSW 2447 40.0 16.5 No / Type 1 Risk: Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria

Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Notes:

Name: Date: Signature: Position: Required Mitigation Measures:

SoundAdvice-

Noise Prediction and Management Tool

Noise Impact Assessment Report

Report Details Report Date: Company:	15/02/201 Pacific		Report Reference: Prepared by:	Transfloor Panel Installı N.Rutherford
Proposed Works Date of Proposed Works; Description of Works	18-19/2	Time of Proposed Works:	7am-5pm Sat and Sun	Work Duration:
Noise Prediction Details				
Expected Meteorological Conditions				
Wind Speed	Strong (16 - 21)		Wind Direction	North East
Cloud Cover	Clear		Temperature (Degrees C)	20 - 30 ° C
Relative Humidity (%)	< 55%		Time of Day	Night (7pm-6am M-F, 4
Proposed Equipment				
Location	Number of Plant	Equipment	Usage Factor	Total Sound Power
Location 13	1	Crane 200 - 300T Lifting load	0.5	102
Location 13	1	Prime Mover Trucks	0.5	110
Location 13	1	EWP	0.75	88
Location 13	3	LVs	<25%	75
Noise Predictions				
Receiver ID	Criteria	Predicted LAeq	Exceedance / Risk	Magnitude - dB(A)
518-18 SIDING ROAD, NORTH MACKSVILLE NSW 2	4 38.0	15.2	No / Type 1	
548-3 COCOS COURT, NAMBUCCA HEADS NSW 24	44.0	24.3	No / Type 1	
589-10 ALEXANDRA DRIVE, NAMBUCCA HEADS N		26.5	No / Type 1	
611-15 ALEXANDRA DRIVE, NAMBUCCA HEADS N	5\ 44.0	24,4	No / Type 1	
618-2 BANGALOW DRIVE, NAMBUCCA HEADS NSV		22.5	No / Type 1	
633-2 ROYALE COURT, NAMBUCCA HEADS NSW 2		22.5	No / Type 1	
			1011902	
Risk:				

Risk: Type 1 - Complies with assessment criteria

Type 2 - Low Risk - O to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria

Type 4 - High Risk - More than SdB(A) above assessment criteria

Notes:

Name: Date: Signature: Position: **Required Mitigation Measures:**

SoundAdvice-

Noise Prediction and Management Tool

Noise Impact Assessment Report

Noise impact Assessment Rep	ort			
Report Details				
Report Date:	15/02/201	-	Report Reference:	Piling Rig Decommission
Company:	Pacific		Prepared by:	N.Rutherford
company.	Pacific		Preparea by:	N.Nacheriora
Deen and Marks				
Proposed Works				
Date of Proposed Works:	18/02/17	Time of Proposed Works:	1-4pm	Work Duration:
Description of Works				
Notes Bardinian Bartalla				
Noise Prediction Details				
Expected Meteorological Conditions				
Wind Speed	Strong (16 - 21)		Wind Direction	North East
Cloud Cover	Mostly Overcast		Temperature (Degrees C)	20 - 30 ° C
Relative Humidity (%)	65 - 75%		Time of Day	Extended Hours
Proposed Equipment				
Location	Number of Plant	Equipment	Usage Factor	Total Sound Pawer
Location 13	1	Crane - 50 -100T (160kW)	0.75	103
Location 13	1	Excavator 20T - 50T - loading	0.75	108
Location 13	1	EWP	0.75	88
Location 13	1	Compressor	0.75	99
Location 13	1	Bored Piling Rig	0.75	104
Location 13	1	Pressure Cleaner	0.75	99
Location 13	2	LV's	<25%	75
Noise Predictions				
Receiver ID	Criteria	Predicted LAeq	Exceedance / Risk	Magnitude - dB(A)
273 UPPER WARRELL CREEK ROAD, CONGARINNI	45.0	5.5	No / Type 1	
74-73 ALBERT DRIVE, WARRELL CREEK NSW 2447	45.0	14.0	No / Type 1	
81-40 ALBERT DRIVE, DONNELLYVILLE NSW 2447	45.0	22.3	No / Type 1	
89-33 O'DELLS ROAD, DONNELLYVILLE NSW 2447	45.0	5.9	No / Type 1	
93-8 MAIN STREET, DONNELLYVILLE NSW 2447	45.0	10.8	No / Type 1	
97-4723 PACIFIC HIGHWAY, DONNELLYVILLE NSW :		17.4	No / Type 1	
100-17 ALBERT DRIVE, DONINELLYVILLE NSW 2447	45.0	12.3	No / Type 1	
101-DP1072289, HENRYS LANE, WARRELL CREEL N		3.5	No / Type 1	
103-11 ALBERT DRIVE, DONNELLYVILLE NSW 2447	45.0	12.0	No/Type 1	
163-4 SCOTTS HEAD ROAD, WAY WAY NSW 2447	45.0	25.7	No/Type 1	
115-35 MAIN STREET, DONNELLYVILLE NSW 2447	45.0	11.0	No / Type 1	
151-72 SCOTTS HEAD ROAD, WAY WAY NSW 2447	45.0	13.3	No/Type 1	
112-4 SCOTTS HEAD ROAD, WAY WAY NSW 2447	45.0	24.6	No / Type 1	
Risk:				

Type 1 - Complies with assessment criteria

Type 2 - Levr Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria

Notes:

Name: Date: Signature: Position: Required Mitigation Measures:		
Date: Signature: Position:		
Date: Signature: Position:	Name:	
Signature:		
Position:	Signature:	
Position: Required Mitigation Measures:	Signotore.	
Required Mitigation Measures:	Position:	
	Required Mitigation Measures:	

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SoundAdvice

Noise Prediction and Management Tool

Noise Impact Assessment Report

Pacific Highway Upgrade Warrell Creek to Nambucca Heads Chainage 41,750 - 45,100

Noise Prediction Details Mid greet Spectra Meteorning(a) Conditions Mid greet Subject Meteorning(a) Conditions Mid greet Subject Meteorning(b) Clear Statute Munitary (b) Clear Statute Methods Statute Methods S	Noise Impact Assessment Repo	ort				
Part Ref: 23/23/2017 Approx Reference: Backfilling ergelis Proposed Works AVV Arrange dry: Backfilling ergelis State of Proposed Works: 21/2-5/31 There of Proposed Works: Tame of Proposed Works: Backfilling of pergits shutments: State of Proposed Control Backfilling of pergits shutments: Teme of Proposed Works: Backfilling of pergits shutments: State of Proposed Control Concert Backfilling of pergits shutments: Work Durstion: Station: State of Proposed Control Concert Backfilling of pergits shutments: Work Durstion: North Stat State of Proposed Control Concert Backfilling of pergits shutments: Work Durstion: Station: Proposed Control Concert Backfilling of pergits shutments: Work Durstion: Station: State of Proposed Control Concert Backwards 207:-507:-1000 (0.0000) Total Sourd Prover State of Proposed Control Iteres Stateward 207:-507:-1000 (0.0000) Total Sourd Prover State of Prover State of Prover 3 Backward 207:-507:-1000 (0.0000) Total Sourd Prover State of Prover State of Prover 3 Backward 207:-500 (0.0000) Total Sourd Prover State of Prover State of Prover 3 Backward 207:-500 (0.0000)<	Report Details					
ADV Prepared by: H Proposed Works 21/2-5/2 Time of Proposed Works: 7am 5pm Work Duration: 5at. 5in works 21/2-5/2 Time of Proposed Works: 7am 5pm Work Duration: 5at. 5in works Status Status Status Time of Proposed Works: Status works Status Status Status Time of Proposed Works: Status works Status Status Status Time of Proposed Works: Status works Status Status Time of Proposed Works: Status Status works Status Status Time of Proposed Works: Status Status works Status Status Status Time of Proposed Works: Status Status Status works Status Status Status Time of Proposed Works: Status		22/02/201	7	Report Reference	Backfilling nergola	
Proposed Works biological Conditions biologi						
Dirac of Production 20/2-0/3 Time of Propaged Works: Tame-Spin Work Duretion: Sat, Sun Noise Prediction Details spectred Meteorogical Conditions Wind Spectred Storeg [16 - 21] Wind Direction Wind Direction North East: Storeger Conditions Storeger Conditions North East: Storeger Conditions Storeger Conditions North East: Storeger Conditions North First 1 Magnitude - dB(A) Notes Predictions Conterion Predicted Laeg Exceedincer / Rais North First 1 Magnitude - dB(A) Notes Conterion Conterion Rota Storeger Conterion Storeger Conterion North First 1 Notes Conterion Conterion Predicted Laeg Exceedincer / Rais North First 1 Magnitude - dB(A) <	empany.	612		riepuies of.		
Date of Production 21/2-3/3 Time of Progenet Works: Team - Spin Work Duretion: Sat, Sun Noise Prediction Details pactation decomposed works: Strong [15-73] Wind Direction Noth East: Strong Conditions Strong [15-73] Explainent Strong Conditions Strong Social 1 Execution 201-557 Strong [0-33 83 Strong Social 1 Execution 201-557 Strong [0-33 100 Strong Social 1 Iteerer Strong Fabric 0.3 100 Strong Social 1 Iteerer Strong Fabric 0.3 100 Strong Social 1 Iteerer Strong Fabric 0.3 100 Notice Predictions Citerin Predicted Lang Exceedince / Risk Magnitude - dif(A) Notice Social 100 13.3 No/Type 1 14.4 Strong Social 13.0 13.5 No/Type 1 14.4 Strong Social 13.0 No/Type 1 14.4 14.4 Strong Social <td< td=""><td>Proposed Works</td><td></td><td></td><td></td><td></td><td></td></td<>	Proposed Works					
Description of Works Bettelling of prepole abutments. Noise Prediction Details Strong [16 - 71] Wind Direction North Exit Down Gover Clier Temperature (Dirprest C) North Exit Down Gover Clier Temperature (Dirprest C) North Exit Proposed Equipment North First So - 20 ° C North Exit Resting A Market		25/2-5/3	Time of Proposed Works:	7am-5pm	Work Duration:	Sat. Sun
Noise Prediction Details Departed Measonlegical Conditions Mind Speed Cool Cover Measonlegical Cover Measonlegica		rate at a				
Dipacted Metasonlegical Conditions Mind Speed Clear	Ascription of Works		Determine of her Pers and one up			
Departed Meteorological Conditions Strong [16 - 21] Wind Direction North East Cold Cow in Citer Temperature (Day percect) 10 - 20 ° C Reticher Humitigit (%) < 55%	Notes Bardinting Batalla					
March Speed Strong [16 - 21] Wind Direction North East Code draw Clear Temperature [Dapres C] 10 - 20 * C Proposed Equipment Teme of Day Night [Zem-6am M-6, 4pm-7am Sat, all day Surder Coastion Number of Plaint Equipment 0.25 93 Coastion 5 1 Exavator 201. 50-1 103 10 Coastion 5 1 Baravers 201. 50-1 103 10 Coastion 5 1 Baravers 201. 50-1 100 10 Coastion 5 1 Inter 80x8 Clears 235 Status Status 201. 50-5 100 Coastion 5 1 Inter 80x8 Clears 235 Status 201. 50-5 100 Notice Predictions 2 Truck and bar. Moving 0.5 100 Iscatus 6 0.0 8.3 No / Type 1 400 A A A A A A A A A A A A A A A A A A						
Cale Care Care Temperature (Dapres C) 10 - 20 * C Night (Zeme Annu Me, Agen-Pare Set, all day Sunda Temperature (Dapres C) Night (Zeme Annu Me, Agen-Pare Set, all day Sunda Socialization (N) Number of Num Executor (DT - Ionaling 2.3 93 Socialization S 1 Executor (DT - Ionaling 2.3 97 Socialization S 1 Ferviewer DT - Stit - Ionaling 0.35 97 Sociation S 1 Item PBOQe-Baker S1355 Sike State Laade-Moving 0.5 100 Sociation S 1 Item PBOQe Baker S1355 Sike State Laade-Moving 0.5 100 Notice Predictions 1 Tem Aramaner 0.25 94 Hold Origona C, Conzamini 40.0 8.3 No / Type 1 Nagnitude - dB(A) Hold Origona C, Conzamini 40.0 8.5 No / Type 1 Nagnitude - dB(A) Hold Origona C, Conzamini 40.0 8.5 No / Type 1 Nagnitude - dB(A) Hold Origona C, Conzamini 40.0 8.5 No / Type 1 Nagnitude - dB(A) Hold Origona C, Conzamini 40.0 8.5 No / Type 1 Nagnitude - dB		0.0000000000000				
Detective runnality (N) < 335. Time of Day Number of						
Proposed Equipment Number of Plant Equipment Usage Factor Total Sound Power Location 5 1 Executed 2015 - 501 - loading 0.23 93 Location 5 1 Executed 2015 - 501 - loading 0.23 93 Location 5 1 Item Pacification 1 0.3 91 Location 5 1 There hammer 0.23 93 Location 5 1 There hammer 0.25 94 Location 5 No (Type 1 Hore Hammer 0.25 94 Location 5 No (Type 1 Hore Hammer 0.25 94 Location 6 No (Type 1 Hore Hamer Hore Hamer Hore Hamer						
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Number of Num Faujment Usage Factor Total Sound Power Location 5 1 Executer 107 - loading 0.25 93 Location 5 1 Executer 107 - loading 0.25 97 Location 5 1 Item # Strig Boack 5185 Stat Stee Loader-Moving 0.5 110 Location 5 1 Item # Strig Boack 5185 Stat Stee Loader-Moving 0.5 105 Noise Predictions 2 Truck and Dag - Moving 0.5 105 Noise Predictions 5 103 Magnitude - dB(A) Location 5 2 Truck and Dag - Moving 0.5 105 Noise Predictions 5 80 / Tym 1 400 / 103 8.3 Mov/ Tym 1 Location 5 0.5 105 105 105 105 Noise Origin Mark Machine Collex Nova And O 8.3 Mov/ Tym 1 400 / 107 106 106 106 106 106 106 106 106 106 106 106 106 106 106 106 106 106 <td>Proposed Equipment</td> <td></td> <td></td> <td></td> <td></td> <td></td>	Proposed Equipment					
acation 5 1 Executor 2071 - loading 0.25 93 acation 5 1 Executor 2075 - Soft - loading 0.25 103 acation 5 1 Iterer 850ig-Baback 3155 Sidt Steer Lader-Moving 0.5 110 acation 5 1 Iterer 850ig-Baback 3155 Sidt Steer Lader-Moving 0.5 105 Noise Predictions		Number of Plant	Equipment	Usage Factor	Total Sound Power	
Loadion 5 1 Executor 207 - 507 - Loading 0.25 103 Loadion 5 1 Biteer #50kg-Bobars 3185 Skie Steer Loader-Moving 0.5 110 Loadion 5 1 Intern #50kg-Bobars 3185 Skie Steer Loader-Moving 0.5 103 Noise Predictions 2 Truck and Dag - Moving 0.5 105 Noise Predictions 2 Truck and Dag - Moving 0.5 105 17-100 UPPR WARKELL CREEK ROAD, CONSAMINI 400 8.3 No / Yrp 1 104 104 4-400 KARCIC CREEK ROAD, CONSAMINI 400 8.3 No / Yrp 1 104 105 107 4-400 KARCIC CREEK ROAD, CONSAMINI 400 8.3 No / Yrp 1 104 105 107 4-400 KARCIC CREEK ROAD, CONSAMINI 400 10.5 No / Yrp 1 104						
Loration 5 1 97 dumper 0.25 97 Loration 5 1 Littler B50g-Bobast 3155 SUIS See Loader-Moving 0.5 110 Loration 5 2 Trunch rammer 0.25 94 Loration 5 2 Trunck and Dag - Moving 0.5 105 Noise Predictions Receiver J0 Criteria Predicted Laeg Exceedance / fisis Magnituder - dB(A) Store WARKLIC CREEK RIDAD, CONGAININI 40.0 8.3 No / Type 1 Horizon UPRE WARKLIC CREEK RIDAD, CONGAININI 40.0 8.3 No / Type 1 Store UPRE WARKLIC CREEK RIDAD, CONGAININI 40.0 18.3 No / Type 1 Store UPRE WARKLIC CREEK RIDAD, CONGAININI Store UPRE WARKLIC CREEK RIDAD, CONGAININI 40.0 18.3 No / Type 1 Store UPRE WARKLIC CREEK RIDAD, CONGAININI MAD 40.0 18.3 No / Type 1 Store UPRE WARKLIC CREEK RIDAD, CONGAININI MAD 40.0 18.3 No / Type 1 Store UPRE WARKLIC CREEK RIDAD, CONGAININI MAD 40.0 12.6 No / Type 1 Store RIGH UPRE WARKLIC CREEK RIDAD, CONGAININI MAD 40.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Laste 15 0 1 Ister 1505 Schutz 3155 Skid Saver Lander-Marving 0.5 110 Laste 15 0 2 Truck and Dag - Marving 0.5 105 Noise Predictions - - - - - - - - - - - 0.5 105 Noise Predictions -		-				
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Instant S 2 Truck ed Dog - Moving 0.5 105 Noise Predictions Receiver 10 Criteria Predicted Laleg Exceedonce / Risk Magnitude - dB(A) 1-760 UPBER WAAREL CEREK NOA, CONGARINNI 40.0 8.3 No/Type 1 4-201 PACIFIC HIGHWAY, CONGARINNI 40.0 8.5 No/Type 1 4-201 PACIFIC HIGHWAY, CONGARINNI NE 40.0 18.5 No/Type 1 4-201 PACIFIC HIGHWAY, CONGARINNI NE 40.0 18.5 No/Type 1 1-421 PACIFIC HIGHWAY, CONGARINNI NE 44.0 18.5 No/Type 1 1-423 PACIFIC HIGHWAY, CONGARINNI NE 44.0 18.5 No/Type 1 1-423 PACIFIC HIGHWAY, CONGARINNI NE 44.0 18.5 No/Type 1 1-423 PACIFIC HIGHWAY, CONGARINNI NE 44.0 0.0 24.3 No/Type 1 1-2437 PACIFIC HIGHWAY, CONGARINNI NE 44.0 0.0 25.1 No/Type 1 1-2437 PACIFIC HIGHWAY, WAAREL CREEK NSW 40.0 2.5 No/Type 1 1-2437 PACIFIC HIGHWAY, WAAREL CREEK NSW 40.0 1.7 No/Type 1 2-4417 PACIFIC HIGHWAY, WAAREL CREEK NSW 40.0 1.3 No/Type 1 2-4417 PACIFIC HIGHWAY, WAAREL CREEK NSW 40.0						
Noise Predictions Criteria Predicted Laeg Exceedance / Risk Magnitude - dB(A) 1-760 UPBE WARRELL CREEK ROAD, CONGARINHI 40.0 8.3 No / Type 1 3-800 UPBE WARRELL CREEK ROAD, CONGARINHI 40.0 8.5 No / Type 1 3-401 PACIFIC INDUWAY, UNGA CREEK KW0 / 40.0 18.5 No / Type 1 3-4401 PACIFIC INDUWAY, UNGA CREEK KW0 / 40.0 18.5 No / Type 1 10-4337 PACIFIC INDIWAY, WARRELL CREEK KW0 / 40.0 24.3 No / Type 1 11-4283 FACIFIC INDIWAY, WARRELL CREEK KW0 / 40.0 24.3 No / Type 1 13-535542, COCKBURIS LARE, WARRELL CREEK KW0 / 40.0 25.1 No / Type 1 13-607755542, COCKBURIS LARE, WARRELL CREEK KW0 / 40.0 2.9 No / Type 1 13-60755542, COCKBURIS LARE, WARRELL CREEK KW0 / 40.0 3.2 No / Type 1 14-426 PACIFIC INDIWAY, WARRELL CREEK KW0 / 40.0 3.7 No / Type 1 34-476 PACIFIC INDIWAY, WARRELL CREEK KW0 / 40.0 1.7 No / Type 1 34-476 PACIFIC INDIWAY, WARRELL CREEK KW0 / 40.0 1.7 No / Type 1 34-476 PACIFIC INDIWAY, WARREL CREEK KW0 / 40.0 1.7 No / Type 1 34-476 PACIFIC INDIWAY, WARREL CREEK KW0 /						
Receiver 30 Criteria Predicted LAeq Exceedance / Risk Magnitude - dB(A) 1-760 UPPEN WARREL CREEK ROAD, CONGARINNI 40.0 8.3 No / Type 1 3-00 UPPEN WARREL CREEK ROAD, CONGARINNI 40.0 8.5 No / Type 1 4-201 RACITIC HIGHWAY, RUNAL CREEK NSW 24 40.0 18.3 No / Type 1 4-401 ROUSSING ROAD, WARREL CREEK SW 24 40.0 18.5 No / Type 1 1-4301 FUIGHWAY, RUNAL CREEK NSW 244 40.0 18.5 No / Type 1 1-4317 FACITIC HIGHWAY, CONGARINNI NSW 244 40.0 24.3 No / Type 1 1-4357 FACITIC HIGHWAY, CONGARINNI NSW 244 40.0 26.1 No / Type 1 1-4357 FACITIC HIGHWAY, CONGARINNI NSW 244 40.0 26.1 No / Type 1 1-4357 FACITIC HIGHWAY, WARREL CREEK NSW 40.0 25.1 No / Type 1 1-973 COCREUNINS LANE, WARREL CREEK NSW 40.0 1.7 No / Type 1 1-974 FACITIC HIGHWAY, WARREL CREEK NSW 40.0 1.7 No / Type 1 1-974 FACITIC HIGHWAY, WARREL CREEK NSW 40.0 1.7 No / Type 1 1-974 FACITIC HIGHWAY, WARREL CREEK NSW 40.0 1.7 No / Type 1	savenum 2		cross one bug - morning	and a	200	
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1400 UPRR WARREL CHEEK NOA, CONSAMININI 400 8.5 No / Type 1 4-4201 PACIFIC HIGHWAY, EUNGAI CREEK NSW 24 40.0 18.3 No / Type 1 6-420 FACIFIC HIGHWAY, CONGAMINNI NSW 244 40.0 18.5 No / Type 1 1-4317 PACIFIC HIGHWAY, CONGAMINNI NSW 244 40.0 18.9 No / Type 1 1-4357 PACIFIC HIGHWAY, CONGAMINNI NSW 244 40.0 24.3 No / Type 1 1-4357 PACIFIC HIGHWAY, CONGAMINNI NSW 244 40.0 24.3 No / Type 1 1-4357 PACIFIC HIGHWAY, CONGAMINNI NSW 244 40.0 26.1 No / Type 1 1-4357 PACIFIC HIGHWAY, WARREL CHEEK NSW 24 40.0 26.1 No / Type 1 1-975 SCAC, COCKBURNS LARE, WARREL CHEEK NSW 24 40.0 25 No / Type 1 19-73 COCKBURNS LARE, WARREL CHEEK NSW 240.0 25 No / Type 1 19-73 COCKBURNS LARE, WARREL CHEEK NSW 40.0 32 No / Type 1 19-747 DAVICH HIGHWAY, WARREL CHEEK NSW 40.0 13 No / Type 1 19-426 PACIFIC HIGHWAY, WARREL CHEEK NSW 24 40.0 15 No / Type 1 54-430 PACIFIC HIGHWAY, WARREL CHEEK NSW 24 40.0 15 No / Type 1 54-46 ROSINCOOD DADAD, WARREL CHEEK NSW 24 40.0<					wagurines - aptv/	
14-201 PACIFIC HIGHWAY, FUNGAL CREEK NSW 24 40.0 18.3 No / Type 1 5-464 BROWNS GROSAN BRAAD, WARRELL CREEK NSW 40.0 18.5 No / Type 1 10-437 PACIFIC HIGHWAY, CORGARINNI NSW 2447 40.0 10.6 No / Type 1 11-435 PACIFIC HIGHWAY, CORGARINNI NSW 2447 40.0 24.3 No / Type 1 11-435 PACIFIC HIGHWAY, CORGARINNI NSW 244 40.0 24.3 No / Type 1 11-435 PACIFIC HIGHWAY, CORGARINNI NSW 244 40.0 24.3 No / Type 1 12-437 PACIFIC HIGHWAY, CORGARINNI NSW 244 40.0 24.1 No / Type 1 12-437 PACIFIC HIGHWAY, CORGARINNI NSW 244 40.0 25.1 No / Type 1 12-437 PACIFIC HIGHWAY, CORGARINNI NSW 244 40.0 25.1 No / Type 1 12-437 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 40.0 27.7 No / Type 1 19-73 COCREWINS LANE, WARRELL CREEK NSW 24 40.0 13 No / Type 1 45-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 44 0.0 13 No / Type 1 55-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 44 0.0 15 No / Type 1 55-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 40.0 15 No / Type 1 55-467 PACIFIC HIGHWAY, WARREL CREEK NSW 24 36.0 12 No / Type 1 55-468 ROSEWOOD ROAD, WARREL CREEK NSW 24 36.0<						
5-464 BROWNS CROSSING ROAD, WARRELL CREEK 40.0 18.5 No / Type 1 -4.227 ACIIIC INGINUAY, CONGAUINNI SW 244; 40.0 10.6 No / Type 1 14-263 PACIIIC INGINUAY, CONGAUINNI SW 244 40.0 24.3 No / Type 1 14-263 PACIIIC INGINUAY, CONGAUINNI SW 244 40.0 24.3 No / Type 1 14-263 PACIIIC INGINUAY, CONGAUINNI SW 244 40.0 24.3 No / Type 1 14-27 124371 PACIIIC INGINUAY, CONGAUINNI SW 244 40.0 26.1 No / Type 1 15-97 50000 COCKBURNS LANE, WARRELL CREEK, 40.0 26.1 No / Type 1 15-97 50000 COCKBURNS LANE, WARRELL CREEK, SW 24 40.0 25.0 No / Type 1 15-97 50000 LIGHWAY, WARRELL CREEK NSW 24 40.0 25.0 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 40.0 2.2 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 240.0 1.5 No / Type 1 15-478 PACIIIC INGINUAY, WARRELL CREEK NSW 240.0 1.5 No / Type 1 16-0100 DADQ, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 16-0100 DADQ, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 16-0100 DADQ, WARRELL CREEK NSW 24 36.0 7.2 No / Type 1 16-0100 DADQ, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 16-0100 DADQ, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 16-0100 DADQ, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 1778 - Yape 4 - High Risk - More than 5dB(Å) above assessment criteria Type 2 - Low Risk - 0 to 2 dB(Å) above assessment criteria Type 2 - Low Risk - 0 to 2 dB(Å) above assessment criteria Type 4 - High Risk - More than 5dB(Å) above assessment criteria Type 5 - High Risk - More than 5dB(Å) above assessment criteria Type 5 - High Risk - More than 5dB(Å) above assessment criteria PACE: P						
6-4227 PACHIC HIGHWAY, CONGARINNI NSW 2447 40.0 18.9 No / Type 1 10-437 PACHIC HIGHWAY, CONGARINNI NSW 2447 40.0 10.6 No / Type 1 11-435 PACHIC HIGHWAY, CONGARINNI NSW 2447 40.0 24.3 No / Type 1 12-435 PACHIC HIGHWAY, CONGARINNI NSW 2447 40.0 24.3 No / Type 1 12-435 PACHIC HIGHWAY, CONGARINNI NSW 2447 40.0 26.1 No / Type 1 12-435 PACHIC HIGHWAY, WARREL CREEK NSW 240.0 26.1 No / Type 1 13-70 CORCINENS LANE, WARREL CREEK NSW 240.0 29 No / Type 1 14-476 PACHIC HIGHWAY, WARREL CREEK NSW 40.0 17 No / Type 1 15-476 PACHIC HIGHWAY, WARREL CREEK NSW 40.0 13 No / Type 1 55-478 PACHIC HIGHWAY, WARREL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACHIC HIGHWAY, WARREL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACHIC HIGHWAY, WARREL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACHIC HIGHWAY, WARREL CREEK NSW 40.0 1.5 No / Type 1 55-478 PACHIC HIGHWAY, WARREL CREEK NSW 24 36.0 7.2 No / Type 1 56-478 PACHUC HIGHWAY, WARREL CREEK NSW 24 36.0 1.6 No / Type 1 56-50 PAOL						
10-4337 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 10.6 No / Type 1 11-4283 PACIFIC HIGHWAY, CORGARINNI NSW 244 40.0 24.3 No / Type 1 12-437 PACIFIC HIGHWAY, MARRELL CREEK NSW 40.0 26.1 No / Type 1 12-72 471 PACIFIC HIGHWAY, MARRELL CREEK NSW 40.0 26.1 No / Type 1 13-73 COCKBURNS LANE, WARRELL CREEK NSW 40.0 20.4 No / Type 1 13-74 COCKBURNS LANE, WARRELL CREEK NSW 40.0 2.9 No / Type 1 13-74 COCKBURNS, WARRELL CREEK NSW 40.0 3.2 No / Type 1 13-4431 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 13-4431 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 14-4590 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.3 No / Type 1 53-464 RISHT DRIVE, WARRELL CREEK NSW 40.0 1.5 No / Type 1 53-464 RISHWOOD ROAD, WARRELL CREEK NSW 36.0 1.2 No / Type 1 54-66 ROSEWOOD ROAD, WARRELL CREEK NSW 36.0 1.2 No / Type 1 64-69 ROSEWOOD ROAD, WARRELL CREEK NSW 36.0 1.2 No / Type 1 65-140 ROSEWOOD ROAD, WARRELL CREEK NSW 36.0 1.5 No / Type 1 This Type 1 - Complies with assessment						
11-2303 PACIFIC HIGHWAY, CONGARINNI NSW 244 40.0 24.3 No / Type 1 12-4351 PACIFIC HIGHWAY, WARREL CREEX NSW 40.0 4.2 No / Type 1 13-4200 COCKBURNS LANE, WARREL CREEX NSW 24 40.0 26.1 No / Type 1 19-75 COCKBURNS LANE, WARREL CREEX NSW 24 40.0 29 No / Type 1 19-75 COCKBURNS LANE, WARREL CREEX NSW 24 40.0 29 No / Type 1 19-75 COCKBURNS LANE, WARREL CREEX NSW 24 40.0 29 No / Type 1 19-75 COCKBURS LANE, WARREL CREEX NSW 40.0 1.7 No / Type 1 51-96 ALBERT, CREEX NSW 247 40.0 1.3 No / Type 1 55-4672 PACIFIC HIGHWAY, WARREL CREEX NSW 247 40.0 1.5 No / Type 1 55-4672 PACIFIC HIGHWAY, WARREL CREEX NSW 244 40.0 1.5 No / Type 1 55-4672 PACIFIC HIGHWAY, WARREL CREEX NSW 24 40.0 1.5 No / Type 1 55-4672 PACIFIC HIGHWAY, WARREL CREEX NSW 24 40.0 1.5 No / Type 1 55-4672 PACIFIC HIGHWAY, WARREL CREEX NSW 24 36.0 7.2 No / Type 1 56-60 72.2 No / Type 1 56.0 2.9 No / Type 1 66-126 ROSPWOOD ROAD, WARREL CREEX NSW 24 36.0 2.5 No / Type 1 Type 1 - Complies with assesament criteria Type 2 - LOW						
12 4371 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 4.2 No / Type 1 16-0°753602, COCKBURNS LARE, WARRELL CREEK, W40.0 26.1 No / Type 1 19-73 COCKBURNS LARE, WARRELL CREEK NSW 40.0 30.4 No / Type 1 19-476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 2.9 No / Type 1 19-476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 19-476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 54-300 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 54-4300 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 54-4300 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.5 No / Type 1 54-470 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.5 No / Type 1 54-470 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 54-470 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0.5 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0.6 No / Type 1 7 No / Type 1						
18-DP755562, COCKBURNS LANE, WARRELL CREEK 40.0 26.1 No / Type 1 19-75 COCKBURNS LANE, WARRELL CREEK NSW 24 40.0 30.4 No / Type 1 25-413 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 2.9 No / Type 1 35-4476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 35-456 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 55-196 ALBERT DRIVE, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 2407 40.0 1.5 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 244 40.0 1.5 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 36.0 7.2 No / Type 1 66-180 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-19 ACSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 66-14 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 TOTAL CREEK NSW 24 36.0 10.6 No / Type 1 TO SEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6						
19-73 COCKBURNS LANE, WARRELL CREEK NSW 24 40.0 30.4 No / Type 1 22-4311 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 2.9 No / Type 1 95-476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 45-4390 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 55-166 ALBERT DRIVE, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 244 40.0 1.7 No / Type 1 55-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 244 40.0 1.7 No / Type 1 55-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 244 40.0 1.7 No / Type 1 55-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 244 40.0 1.7 No / Type 1 55-467 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 60-10 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.6 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.6 No / Type 1 Risk: Type 1 - Complies with assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria<						
22-411 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 2.9 No / Type 1 19-4476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 45-4390 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 51-96 ALBERT DRIVE, WARRELL CREEK NSW 40.0 1.3 No / Type 1 55-467 ROSEWOOD ROAD, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-467 ROSEWOOD ROAD, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-467 ROSEWOOD ROAD, WARRELL CREEK NSW 40.0 1.5 No / Type 1 56-467 ROSEWOOD ROAD, WARRELL CREEK NSW 40.0 1.5 No / Type 1 66-100 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-100 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 66-100 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0 5 66-101 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0 5 Figure 1 Figure 2 No / Type 1 Figure 2 Figure 2 No / Type 1 Figure 2 Figure 2 Figure 2 Figure 2 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td></td<>						
19-4476 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 45-4390 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 51-196 ALBERT DRIVE, WARRELL CREEK NSW 40.0 1.3 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 55-478 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 55-468 ROSEWOOD ROAD, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 66-98 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 7.2 No / Type 1 66-91 A ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 7 Second Road, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 8kit Type 2 - tow Risk - 0 to 2 db(A) above assessment criteria Type 2 - tow Risk - 0 to 2 db(A) above assessment criteria Type 4 High Risk - More than 5db(A) above assessment criteria Type 4 - High Risk - More than 5db(A) above assessment criteria Type 3 Type 3 Type 3 Type 3 Signature:						
43-390 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 3.2 No / Type 1 51-96 AUSTRY DRIVE, WARRELL CREEK NSW 40.0 1.3 No / Type 1 55-4673 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.5 No / Type 1 55-4673 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.5 No / Type 1 55-4673 PACIFIC HIGHWAY, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 60-100 ROSEWOOD ROAD, WARRELL CREEK NSW 23 36.0 7.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.5 No / Type 1 66-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.5 No / Type 1	22-4411 PACIFIC HIGHWAY, WARRELL CREEK NSW					
S1-196 ALBERT DRIVE, WARRELL CREEK NSW 2447 40.0 1.3 No / Type 1 S5-457 PACIFIC HIGHWAY, WARRELL CREEK NSW 440.0 1.7 No / Type 1 S9-467 ROSEWOOD ROAD, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 60-100 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 7.2 No / Type 1 64-69 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0.6 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0.6 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0.6 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.0.6 No / Type 1 Risk: Type 1 - Complies with assessment criteria Type 3 - Moderate Risk - More than 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Signature: Position:						
55-4478 PACIFIC HIGHWAY, WARRELL CREEK NSW 40.0 1.7 No / Type 1 59-46 ROSEWOOD ROAD, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 60-180 ROSEWOOD ROAD, WARRELL CREEK NSW 23 36.0 7.2 No / Type 1 64-98 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - - -						
S9-46 ROSEWOOD ROAD, WARRELL CREEK NSW 24 40.0 1.5 No / Type 1 40-100 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 7.2 No / Type 1 64-69 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 661-74 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 2.9 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 - - - - - Risk: - - - - Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria - - - Type 4 - High Risk - More than 5dB(A) above assessment criteria - - - Notes: - - - - - Date: - - - - - Signature: - - - - - Position: - - - - -						
60-18D ROSEWOOD ROAD, WARRELL CREEK NSW 2 36.0 7.2 No / Type 1 64-69 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 2 36.0 2.9 No / Type 1 66-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 7 Risk: Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Type 5 - Moderate Risk - 2 dB(A) to 5 dB(A) above assessment criteria Type 5 - Notes: Name: Date: Signature: Position:						
64-89 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 1.2 No / Type 1 66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 2 36.0 2.9 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 Risk: Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position:	59-46 ROSEWOOD ROAD, WARRELL CREEK NSW 24					
66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 2 36.0 2.9 No / Type 1 68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.6 No / Type 1 - Risk: Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5 dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position:						
68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 24 36.0 10.5 No / Type 1 - Risk: Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Nates: Date: Signature: Position:						
	66-174 ROSEWOOD ROAD, WARRELL CREEK NSW 2					
Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position:	68-91 ROSEWOOD ROAD, WARRELL CREEK NSW 2-	4 36.0	10.6	No / Type 1		
Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position:	Risk:					
Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 3 - Migh Risk - More than 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position:	Type 1 - Complies with assessment criteria					
Type 4 - High Risk - More than 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position:						
Name: Date: Signature: Position:			nt criteria			
Name: Date: Signature: Position:	Notes:					
Date: Signature: Position:			-			_
Signature: Position:						-
Position:	Date:					
	Signature:					
	Position:					
	Required Mitigation Measures:					

SoundAdvice

Noise Prediction and Management Tool

Noise Impact Assessment Report

Pacific Highway Upgrade Warrell Creek to Nambucca Heads Chainage 47,700 - 49,300

Noise Impact Assessment Rep	ort				
Report Details					
Report Date:	22/02/201	7	Report Reference:	LWC deck pours + re-	
Company;	AFJ		Prepared by:	Jack H	
Proposed Works					
Date of Proposed Works: Description of Works	23/2-30/6/2017	Time of Proposed Works: Deck pours and reo fixing at LWC bridge	4-7am,6-7pm M-F, 7-8am,1-4p	am Sa Wark Duretian:	During bridge works
Noise Prediction Details					
Expected Meteorological Conditions					
Wind Speed	Strong (16 - 21)		Wind Direction	East	
Cloud Cover Relative Humidity (%)	Clear < 55%		Temperature (Degrees C) Time of Day	10 - 20 ° C	, 4pm-7am Sat, all day Sunday)
	4.33%		vine of Day	reget (rpm-camile-r	, «pm-zam sat, an day sunday j
Proposed Equipment					
Location	Number of Plant	Equipment	Usage Factor	Total Sound Power	
Location 3	1	EWP	0.5	90	
Location 3	1	EWP	0.5	90	
Location 3	3	Concrete poker vibrator	0.25	90	
Location 4 Location 3	3	Concrete poker vibrator Small tools	0.25	90 88	
Location 4	2	Small tools	0.25	88	
Location 4	1	Vibrating screed	0.25	98	
Location 3	1	Vibrating screed	0.25	98	
Location 4	1	Concrete Pump + Cement Mixer Truck 8 t / 350 ba		93	
Location 3	1	Concrete Pump + Cement Mixer Truck 8 t / 350 ba	r 0.5	93	
Noise Predictions					
	Criteria	Residuard Libra	Exceedance / Risk	Advantitude (1974)	
Receiver ID 112-4 SCOTTS HEAD ROAD, WAY WAY NSW 2447	40.0	Predicted LAeg 24.5	No / Type 1	Magnitude - dB(A)	
117-15 REID STREET, MACKSVILLE NSW 2447	39.0	16.9	No/Type 1		
131-DP826440, HARRIMANS LANE, MACKSVILLE N		18.2	No / Type 1		
148-1 REID STREET, MACKSVILLE NSW 2447	39.0	15.4	No / Type 1		
151-72 SCOTTS HEAD ROAD, WAY WAY NSW 2447	40.0	35.5	No / Type 1		
155-26 HARRIMANS LANE, MACKSVILLE NSW 244	39.0	19.1	No / Type 1		
163-4 SCOTTS HEAD ROAD, WAY WAY NSW 2447	40.0	38.4	No / Type 1		
175-34 HARRIMANS LANE, NSW	39.0	19.6	No / Type 1		
180-58 HARRIMANS LANE, MACKSVILLE NSW 244		19.0	No / Type 1		
186-41 BALD HILL ROAD, MACKSVILLE NSW 2447	39.0	10.7	No / Type 1		
192-38 KERR DRIVE, MACKSVILLE NSW 2447 193-KERR DRIVE, MACKSVILLE NSW 2447	39.0 39.0	5.2 17.8	No/Type1 No/Type1		
194-DP1014123, KERR DRIVE, MACKSVILLE NSW 2		22.2	No/Type 1		
197-54 BALD HILL ROAD, MACKSVILLE NSW 2447	39.0	15.4	No / Type 1		
261-13 CONNORS CRESCENT, MACKSVILLE NSW 2		14.4	No / Type 1		
266-2 AINSWORTH CLOSE, MACKSVILLE NSW 244		14.2	No / Type 1		
302-98 BALD HILL ROAD, MACKSVILLE NSW 2447	39.0	11.2	No / Type 1		
342-228 SCOTTS HEAD ROAD, WAY WAY NSW 244	36.0	11.2	No / Type 1		
Risk: Type 1 - Complies with assessment criteria					
Type 2 - Low Risk - 0 to 2 dB(A) above a	ssessment crite	ria			
Type 3 - Moderate Risk - 2dB(A) to 5dB					
Type 3 - Moderate Hisk - Zab(A) to Sab Name:	full nonse assess	STATUTE CLEAR STATUTE			_
Date:					
Signature:					
Position:					
Required Mitigation Measures:					7
		-			
		1			

SoundAdvice-Pε Noise Prediction and Management Tool Wz Cł Noise Impact Assessment Report **Report Details** 23/02/2017 Report Date: Report Reference: Steel Fixing on Abut B & Company: Pacifico N.Rutherford Prepared by: Proposed Works Date of Proposed Works: 23/2-25/2 Time of Araposed Works: Work Duration: 6pm-6am Description of Works Noise Prediction Details Expected Meteorological Conditions Wind Speed Strong (16 - 21) Wind Direction North East 10 - 20 ° C **Cloud Cover** Clear Temperature (Degrees C) Relative Humidity (%) < 55% Time of Day Night (7pm-6am M-F, 4 Proposed Equipment Lisage Factor Total Sound Power Location Number of Plant Equipment Location 2 Daymakers (Tower lights) 93 2 1 Location 2 Vacuum Cleaner 0.75 <u>9</u>9 1 Location 2 1 Generator 2.5kV 1 94 Location 2 Circular Saw 0.75 103 1 Noise Predictions Receiver 10 Predicted LAeq Exceedance / Risk Magnitude - d8(A) Criteria 398-2 MATTICK ROAD, NORTH MACKSVILLE NSW 2 38.0 5.6 No / Type 1 402-83 OLD COAST ROAD, NORTH MACKSVILLE NSI 46.0 20.0 No / Type 1 405-4 MATTICK RDAD, NORTH MACKSVILLE NSW 2 38.0 13.5 No / Type 1 409-122 OLD COAST ROAD, NORTH MACKSVILLE N: 38.0 16.0 No / Type 1 414-18 MATTICK ROAD, NORTH MACKSVILLE NSW 38.0 18.2 No / Type 1 429-124 OLD COAST ROAD, NORTH MACKSVILLE N: 15.3 No / Type 1 38.0 491-64 MATTICK ROAD, NORTH MACKSVILLE NSW 58.0 13.4 No / Type 1 499-73 CHAMPIONS LANE, NORTH MACKSVILLE NS 38.0 14.1 No / Type 1 384-DP205344 BELLEVUE DRIVE, NORTH MACKSVII 32.8 No / Type 1 46.0 385-47 NURSERY ROAD, NORTH MACKSVILLE NSW 46.0 35.0 No / Type 1 388-DP654625 NURSERY ROAD, NORTH MACKSVILI 46.0 38.1 No / Type 1 325-1 GRANDVIEW DRIVE, NORTH MACKSVILLE NS' 27.0 No / Type 1 46.0 397-36 OLD COAST ROAD, NORTH MACKSVILLE NSI 46.0 26.6 No / Type 1 400-51 OLD COAST ROAD, NORTH MACKSVILLE NSI 46.0 23.1 No / Type 1 412-24 LETITIA CLOSE, NORTH MACKSVILLE NSW 2-No / Type 1 27.3 46.0 406-20 LETITIA CLOSE, NORTH MACKSVILLE NSW 2-46.0 29.5 No / Type 1 410-19 LETITIA CLOSE, NSW 46.0 25.5 No / Type 1 486-41 LETITIA CLOSE, NORTH MACKSVILLE NSW 2-No / Type 1 19.9 45.0 415-143 NURSERY ROAD, NORTH MACKSVILLE NSV 46.0 22.6 No / Type 1 482-169 NURSERY ROAD, NORTH MACKSVILLE NSV 46.0 23.2 No / Type 1 31153-LOT 1 PACIFIC HWY, NORTH MACKSVILLE 45.9 No / Type 1 45.0 Risk Type 1 - Complies with assessment criteria Type 2 - Low Risk - 0 to 2 dB(A) above assessment criteria Type 3 - Moderate Risk - 2dB(A) to 5dB(A) above assessment criteria Type 4 - High Risk - More than 5dB(A) above assessment criteria Notes: Name: Date: Signature: Position: Required Mitigation Measures:

Services	0011011001	ion Noise Estimator		Steps: 1. Enter project nam						
	20			 Enter scenario ne 3. Enter receiver ad 	dress (cell C11)					
lease input information into yellow cells				4. Select area group	d type (cell C12) - vater, undeve	oped green fields	(e.g. naral areas v	with isolated dwelling	n) or developed se	filements (e.g. urban and suburban areas
ease pick from drop-down list in orange cells				(a) where re	presentative noise environment i	s selected - select	the appropriate n	oise area category (c	cell C16). The work	re noise monitoring data is available); sheet titled Representative Noise Enviro
Project name	and the second se	WC2NH	Section 20	provides a r	rumber of examples to help selected - enter the m	the noise area cal	teopry.			
Scenario name		Set up of Asphalt	Plant	6. Is all plant at the	same representative distance to t	he receiver? Select	t Y or N (sell C2)	each sme penso (ce 4):	es 017 to 0195	
Receiver address Select area ground type		73 Albert Driv Undeveloped green fields oural area			is selected - enter the representa is selected - go to step #7	dive distance in cel	I C25.			
Select type of background noise le	velinput	Liser Input		7. For the scenario	e.g. shallow excavation), select p	lant from the drop-	down list in cells	A28 to A47 (e.g. due	no trucks + excava	tor).
				(a) enter qu	antity for each selected plant in cr is selected from step #6 - enter t	alls D28 to D47.				
Martin a service state service		Representative Noise Environment	User Input	(c) is there	ine of sight to receiver? select fro	m drop down list in	cells F28 to F47	Solid barrier can be	in the form of soad	l outling, solid construction hearding, aco
Noise area calegory	Day		40		ter lapped and capped fence, ship above background and/or noise m				ion and bees are no	st considered to be a form of solid barrier
RBL or Lass Background level (dB(A))	Evening		40	9. Identify and imple	ment standard mitigation measur	es where feasible a	and reasonable. I		implemented as p	art of the standard mitigation measures b
	Night		35	changing the select	on in the 1s there line of sight to loment feasible and reasonable a	receiver' drop-dow	n list.	man El la ES		
	Day		60	11. Document a sur	innary report detailing:					
egitienen Noise mangement level (dB(A))	Day (OOHM)		45	(a) project ((b) backets)	lescription (including location, dur und noise levels.	ation, hours of wor	k, construction m	ethodology, plant, p	otentially impacted	receivers, etc.).
	Evening Night		45	(c) noise m	anagement levels .					
	1 megni				d noise levels for each time perior sturbance affected distance for my					
I plant at the same representative distance	In the receiver? Viti	×		(f) mitigation	n measures.		- 13- 1			
					mber responsible for implementi-	g mitigation meas	ures and manage	ng noise and vibratio	n.	
Representative distance (m		530	All at Representative Dista	nce						
Type(model plant (See Sources Sheet)	SWL LAss (dB(A))	SPL @7m (d8(A))	Quantity	Individual distance to receiver (m)	is there line of sight to receiver? Y.N	Quantity correction (dRA)	Shielding correction idRA)	Distance used in calculation (m)	Contribution SPL (dB(A))	
Light Vehicles (eg 4WD)	193	78	1	330	No (behind solid barrier)	0	-6	330	31	
Generator	103	78	1	330	No (behind solid berrier)	0	-6	330	31	
Small Hand Tools	105	80	3	330	Yes Yes	0	0	330	41	
					Yes	0	0		-558 -668	
	-				Yes Yes	0	0		008- 035-	
					Yes	0	0		-888	
					Yes	0	0		-888	
					Yes Yes	0	0		-808-	
					Yes	0	D		-000-	
					Yes	0	D		-866	
					Yes	0	D		-868	
					Yes	D	D		-550	
					Yes Yes	0	0		-888- 888-	
	-				Yes	0	0		-000	
					Yes	D	D		-558	
					Yes	0	0		-888	
Total SPL L Aug(15minute) (d)	B(A))	41	1		Non-residential receiv					
		Residential receiver	Classroom at schools	Manufacture and	cran s a subscale recent		Deceter	inductor i	000	
	1	reasonnai receiver	and other educational institutions	Hospital wards and operating theatres	Place of worship	Active	Passive recreation	Industrial premise	Offices, retail outlets	
False Hannahan and such server	Standard hours Day (OCHW)	45	55	45	55	45	60	75	70	
Noize Management Level (dB(A))	OOHW Period 1	45		45	55	45	60	75	70	
	OOHW Period 2 Standard hours	40	-	85	55			75	70	
Level above background (dill(A))	Day (ODHIM)	1	1							
rever space paceflipping bank()	OOHW Period 1	Contraction of the second								
	OOHW Period 2					1	1			
Laural scheme MMEL (2007A))	Standard hours Day (DOHIM)		COMPOSITION OF THE OWNER	and the second second	CALL STREET, ST	-	-			
Level above NML (dB(A))	OOHW Period 1	CRUCCHER CONTRACTOR			Second Contraction of the second			CONSIGNATION STATE		
	OOHW Period 2 Standard Hours									
Sector Sect	Day (DOHM)					-	-			
Additional militation mentions							1000	1000 C	Contraction of the local division of the loc	
Additional mitigation measures	OOHW Period 1 OOHW Period 2						-			